

Statement of Basis for
Nucor Steel Seattle, Inc., AOP No. 10281
Modification: March 4, 2008

I. PURPOSE OF THIS STATEMENT OF BASIS

A. General

This document summarizes the legal and factual bases for the permit conditions for the Nucor Steel Seattle, Inc. (Nucor Steel) air operating permit (AOP) to be issued under the authority of the Washington Clean Air Act, Chapter 70.94 Revised Code of Washington, Chapter 173-401 of the Washington Administrative Code and Puget Sound Clean Air Agency Regulation I, Article 7. Unlike the permit, this document is not legally enforceable. It includes references to the applicable statutory or regulatory provisions that relate to Nucor Steel's emissions to the atmosphere. In addition, this statement of basis (SOB) provides a description of Nucor Steel's activities and a compliance history.

B. Modifications during the first permitting period

This document also describes modifications made to the facility and to the air operating permit, with a summary of the changes beginning on Page 3.

C. Renewal 1

This document also describes the first renewal to the Nucor Steel air operating permit, briefly on page 4, and in greater detail on page 24.

II. SOURCE DESCRIPTION

Nucor Steel operates a facility that melts steel into concrete reinforcing bars (rebar) and other small cross-section steel shapes and is located in Seattle, Washington. It has the potential to emit carbon monoxide (CO), oxides of nitrogen (NO_x) and particulate matter (PM) in excess of 100 tons per year and is subject to a federal New Source Performance Standard for electric arc furnaces.

The plant recycles scrap steel by melting and refining the steel, casting it into billets, and rolling the billets into a finished product. The plant draws scrap steel from storage piles along with correctly proportioned quantities of additional materials (such as carbon, lime and alloying metals) held in piles and silos. During charging, the electrodes are raised and the roof of the furnace is swung out of the way so material can be added (charged). After charging, the roof is swung back into position for melting, the electrodes are lowered, and the

furnace begins melting the steel. An arc is generated between three carbon/graphite electrode tips and the steel, resulting in sufficient heat to melt the steel. Additional energy for the melting process is provided by the chemical oxidation of carbon (coke), which has been added to the charge. With the carbon present in the steel scrap, these activities are responsible for most of the carbon monoxide in the process. Oxygen injection serves to reduce NO_x formation and help combust CO inside the furnace shell, which in turn provides additional heat. An even larger amount of CO is combusted with dilution air at the inlet of the duct to the high temperature baghouse.

The reheat furnace emits NO_x at a constant rate because of natural gas combustion. This furnace operates at all times because billets are reheated constantly to make the final product.

Nucor Steel is required to obtain an operating permit under Title V of the Federal Clean Air Act because it has potential to emit carbon monoxide (CO), oxides of nitrogen (NO_x) and particulate matter (PM) in excess of 100 tons per year. There are applicable requirements that regulate the emissions of CO, NO_x, SO₂, and PM from Nucor Steel.

Nucor Steel can operate 24 hours per day, 365 days per year. Currently, however, the melting is steady over two shifts, five days per week and most other operations of the meltshop operate three shifts, seven days per week. Melting occurs while electric rates are low or beginning Friday evening and ending Wednesday morning. The facility Standard Industrial Classification code is 3312.

Nucor Steel has three basic emission groups that contribute to the major emission of the three criteria pollutants: two in the meltshop (the electric arc furnace, and natural gas combustion from the ladle preheaters and flying cutting torches) and the reheat furnace.

The Puget Sound Clean Air Agency approved a modification to the current electric arc furnace on December 22, 1994 (Orders of Approval No. 5690 and No. 5710), which required then Birmingham Steel to comply with 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart AAa, Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed after August 17, 1983.

III. PERMIT HISTORY

A. Original Permit

An air operating permit application was received by the Puget Sound Clean Air Agency from Birmingham Steel on April 15, 1995 pursuant to WAC 173-401-500(3). The application was acknowledged to be complete in a letter from the Puget Sound Clean Air Agency to Birmingham Steel dated September 22, 1995. The original permit, Air Operating Permit No. 10281, was issued on January 22, 2001.

1. Minor Modification and Administrative Amendment 1

On September 21, 2000, Birmingham Steel Corporation submitted an application to change the Responsible Official from Paul Wilson to Eddie Lehner. Administrative Revision 1 to make this change was issued on October 2, 2001.

Birmingham Steel Corporation applied for a minor modification to the air operating permit on June 8, 2001. The purpose of the application was to change the methods for monitoring compliance with the requirements for fugitive dust control to more closely mirror the terms of the underlying applicable requirements. Minor modification 1 was issued on October 2, 2001.

2. Administrative Amendment 2

On December 9, 2002, the plant was purchased by Nucor Steel. Birmingham Steel submitted a request to approve transfer of the permit to Nucor Steel and to approve a change in the name of the responsible official from Eddie Lehner to Doug Jellison. The administrative amendment was issued on December 17, 2002.

3. Significant Modification 1

In April 2004, Nucor Steel proposed a modification to the steel mill, consisting of upgrading the caster by replacing the original water spraying system with a dual spray zone system. This system would control surface temperature on the billet once it exits the mold. It would improve control of internal quality problems such as halfway cracks, off-corner cracks and centerline porosity. This modification would allow an increase in production in the meltshop from 740,000 to 795,000 tons of steel per year by allowing the billets to move at a faster speed through the caster without sacrificing quality. Nucor had also determined that this change, even though it would not involve physical changes to the electric arc furnace (EAF) or either of the baghouses, would cause an increase in the potential emissions of the facility. The potential increase in emissions of fine particulate matter (PM₁₀) was not enough to trigger review under the recently changed federal Prevention of Significant Deterioration Program (PSD), but it did trigger review under the not-then-updated state PSD program. All other potential emissions increases were reviewable under the Puget Sound Clean Air Agency minor new source review program. Therefore Air Operating Permit No. 10281 required a significant permit modification.

On April 28, 2004 Nucor Steel applied with the Washington Department of Ecology for a PSD permit, and that application was determined to be complete on May 25, 2004. The Washington Department of Ecology issued the PSD permit on September 8, 2004.

Nucor Steel submitted a Notice of Construction Application to the Puget Sound Clean Air Agency on September 20, 2004, and that application was determined to be complete on October 6, 2004. Nucor submitted an application for a significant modification to its AOP on September 30, 2004. The Agency developed a draft NOC Order of Approval, and placed the terms and conditions of the draft Order of Approval and the aforementioned PSD permit were

placed into the draft modified AOP. The Puget Sound Clean Air Agency issued the modified AOP on January 20, 2005.

B. Renewal 1

On April 29, 2005, Nucor submitted a renewal application for AOP No. 10281 for the Nucor Steel facility. The application consisted of a cover letter and critical items required under WAC 173-401-710, such as a compliance plan and certification by the responsible official. On May 3, 2005, the Puget Sound Clean Air Agency sent a letter to Nucor indicating that the renewal application had been found to be complete. No substantive changes to the permit were requested by Nucor or made by the Puget Sound Clean Air Agency, but numerous small items were changed, and those changes are described in detail beginning on page 24.

1. Significant Modification 2

In July 2007 Nucor proposed a crane upgrade project to upgrade one of the existing single hoist cranes at the scrap yard to a double hoist crane. This project debottlenecked the EAF and hence steel billet production to allow up to 1.1 million tons of billets per 12 month period. The increase in CO emissions necessitated that Nucor apply for a PSD permit for CO. PSD permit 07-02 is being processed by the Washington Department of Ecology. Nucor applied to the Puget Sound Clean Air Agency for an NOC Order of Approval for increases in pollutants other than CO. Puget Sound Clean Air Agency is processing NOC Order of Approval No. 9669 for the project. The requirements of both PSD 07-02 and NOC 9669 are being added to the AOP as part of this significant modification.

As part of this AOP modification, the Puget Sound Clean Air Agency will also remove the requirements of the rescinded PSD 04-02 from the AOP and NOC 9089 which was cancelled and superseded by NOC 9669. Both PSD 04-02 and NOC 9089 include a 795,000 tons steel production limit which conflicts with the new 1.1 million tons of billets limit in PSD 07-02. Therefore, removing the requirements of these permits was a necessary part of the AOP modification.

- The Washington Department of Ecology rescinded PSD 04-02 on December 14, 2006. This PSD was issued on August 27, 2004 to Nucor for its caster modification project under the provisions of WAC 173-400-151, which adopted the September 15, 2001 version of 40 CFR 52.21. At the time that PSD 04-02 was issued, EPA had already made a modification to 40 CFR 52.21 which made it unnecessary for Nucor to obtain a PSD permit under the modified version of the rule. However, WAC 173-400-151 had not yet adopted the new version of 40 CFR 52.21, and the Washington Department of Ecology was obligated to enforce the September 15, 2001 version, which did require Nucor to obtain a PSD. After PSD 04-02 was issued, the Washington Department of Ecology processed a change to WAC 173-400-151 to adopt the July 2, 2004 version of 40 CFR 52.21. On September 7, 2006 Nucor requested that the Washington Department of Ecology rescind PSD 04-02. The

Washington Department of Ecology agreed to rescind the PSD and processed the final action in a December 14, 2006 Regulator Order No. HQ-06-01.

Two additional changes are being made as part of this AOP modification. The first change is to update the references to the Puget Sound Clean Air Agency's address throughout the AOP to the new Agency address at 1904 Third Ave in Seattle. The second change is to update the AOP reference for Puget Sound Clean Air Agency Reg. I Section 3.07 to the most recent (March 23, 2006) version of the rule. Puget Sound Clean Air Agency Reg. I Section 3.07 deals with source testing and notification requirements, and was modified in 2006 to require that sources provide the Agency with at least 21 days of notice prior to a source test on a form provided by the Agency. Adding the 2006 version of Reg. I Section 3.07 was deemed necessary because NOC 9669, which is being added as part of this AOP modification, requires annual source testing for PM10, NOx, and CO. Such testing will occur before the next time the AOP is reopened or renewed, and the Puget Sound Clean Air Agency would like Nucor to provide test notice in accordance with the 2006 revisions to Reg. I Section 3.07.

IV. COMPLIANCE HISTORY

A. Compliance and Inspection history prior to issuance of the original AOP

The Puget Sound Clean Air Agency has inspected Nucor Steel (formerly Birmingham Steel) annually since 1992. The operating permit for this plant and its subsequent modifications each included a support document, or Statement of Basis, such as the one you are reading now. The compliance history of the plant prior to the issuance of the original permit was documented and considered in that original Statement of Basis.

B. Complaint History since issuance of the original AOP

Nucor Steel is located in an industrial area. The Puget Sound Clean Air Agency has received a minimal number of complaints about this facility over the past five years. Complainants have reported smoke emissions from upset conditions that last for an hour or less, concerns about cooling tower steam emissions going over the West Seattle Bridge, and general concerns about what this industry does, its proximity to nearby homes, and what emissions could be coming from it. Presently, the Puget Sound Clean Air Agency has no open complaint investigations concerning Nucor Steel.

C. Compliance and Inspection history since issuance of the original AOP

During the past five years, the Puget Sound Clean Air Agency conducted ten compliance inspections of the plant. Inspection dates were: November 19, 2004; September 9, 2004; February 10, 2004; November 12, 2003; April 15, 2003; April 8, 2003; March 28, 2003; November 5 and 6, 2001; July 17, 2001; and February 27, 2001.

The Puget Sound Clean Air Agency has taken the following enforcement actions against Birmingham Steel and Nucor Steel during the last five years:

Violation Date	NOV/WW #	Issue Date	Closure Date	Reg/AOP Citation	Note
04/29/01	Written Warning No. 2-000465*	08/10/01	10/05/01	II.A.2(b) & (c)	NSPS Semiannual Report was not signed by the responsible official, 3 days of missed visible emissions readings, missing fan damper and ampere readings for 2 days, fan amperage out of range on 1 day, and failure to submit 3 individual monthly deviation reports. The report was corrected and resubmitted with corrective actions taken.
07/17/01	Written Warning No. 2-000521*	07/17/01	9/30/05	II.A.2(b), (c) & (d); V.N.2(d)	Failure to provide 30-day advance notice of NSPS performance test
07/17/01	Notice of Violation No. 3-001509*	10/12/01	02/19/02	NOC 5710, Cond. 4/ EU-1.7	Failed PM ₁₀ emissions source test. Retest passed.
02/01/03	Written Warning No. 2-000495	04/30/03	04/30/03	II.A.2(b) & (c)	Certified visible emissions observer was not available to collect opacity readings during furnace operations on February 1, 2003, and readings were not taken.
11/01/03	Written Warning No. 2-007018	06/15/04	07/29/04	Reg I: 9.15/ II.A.2(e); I.A.6	Visible fugitive emissions during use of the low temperature baghouse load out screw conveyor with a leak in the rotary valves and production over 720,000 tons per 12 months without reporting to the agency. Both deviations were self-reported and corrected.
11/12/03	Written Warning No. 2-001678	11/12/03	12/22/03	Reg I: 9.20/ I.A.9	Crack found in ductwork by Agency inspector. Nucor took corrective action.

* These enforcement actions were against Birmingham Steel.

V. EMISSION INVENTORY

See Attachment A.

VI. EXPLANATION OF APPLICABLE REQUIREMENTS

Applicable requirements are listed in several sections of this operating permit as outlined below. The permit only lists the requirements that the Puget Sound Clean Air Agency has determined to be within the scope of the definition of “applicable requirements” under the operating permit program. Nucor is legally responsible for complying with all applicable requirements of the operating permit as well as other requirements that do not fit the definition of “applicable requirements” found in Chapter 173-401 Washington Administrative Code (WAC). Some of the applicable requirements contain terms or monitoring, maintenance and recordkeeping that require detailed explanation in this Statement of Basis. The specific conditions are listed below, along with any necessary explanations in monitoring, maintenance and recordkeeping requirements.

A. Applicable Requirements

Nucor is subject to all the requirements listed in Section I of the permit. Section I.A. contains the requirements that are applicable facility-wide and Section I.B. contains requirements applicable only to specific emission units. The requirements in Section I.B. only apply to the specific emission units cited; however, the requirements in Section I.A. also apply to the specific emission units or activities described in Section I.B. If the monitoring, maintenance and recordkeeping method for any requirement in Section I.A. is more extensive for specific emission units, that requirement is repeated in Section I.B. with the additional monitoring, maintenance and recordkeeping requirements.

B. Section I.A. (Facility-Wide)

The tables list the citation for the “applicable requirement” in the second column. The third column (Date) contains the adoption or effective date of the requirement. In some cases, the effective dates of the Federally Enforceable, or “SIP¹,” Requirement and the Non-Federally Enforceable, or “State/Local Only,” Requirement are different because only rules approved by EPA through Sections 110, 111, and 112 of the federal Clean Air Act are federally enforceable, and either the state has not submitted the regulation to the EPA or the EPA has not approved it.

The first column is used as an identifier for the requirement, and the fourth (Requirement Paraphrase) column paraphrases the requirement. The first and fourth columns are for information only and are not enforceable conditions of this permit. The actual enforceable requirement is embodied in the requirement cited in the second and third columns.

¹ “SIP” is an abbreviation for “state implementation plan” which is a plan for improving or maintaining air quality and complying with the Federal Clean Air Act. The Federal Clean Air Act requires states to submit these plans to the US EPA for its review and approval. This plan must contain the rules and regulations of the state agency or local air authority necessary to implement the programs mandated by Federal law. Once the EPA adopts the plan or elements of it, the plan and its requirements become “federally enforceable” by EPA. New or modified state or local rules are not federally enforceable until they are “adopted into the SIP” by the EPA.

The fifth column (Monitoring, Maintenance & Recordkeeping Method) identifies the methods described in Section II of the permit. Following these methods is an enforceable requirement of this permit. The sixth column identifies the averaging time for the reference test method. The last column (Reference Test Method) identifies the reference method associated with an applicable emission limit that is to be used if and when a source test is required. In some cases where the applicable requirement does not cite a test method, one has been added.

In the event of conflict or omission between the information contained in the fourth and sixth columns and the actual statute or regulation cited in the second column, the requirements and language of the actual statute or regulation cited shall govern. For more information regarding any of the requirements cited in the second and third columns, refer to the actual requirements cited.

1. Requirement I.A.2 (Opacity)

Both WAC 173-400-040(1) and Puget Sound Clean Air Agency Regulation I, Section 9.03 standards are 20% opacity and apply to all stationary sources.

The monitoring method is based on quarterly visual inspections of all non-fugitive emission points at Nucor Steel that do not have opacity monitoring requirements in the specific emission units. Nucor Steel must take corrective action or use the reference test method, WDOE Method 9A, to determine opacity if any visible emissions are noted. The Puget Sound Clean Air Agency has determined that the monitoring should be quarterly for the reasons listed below. These factors are consistent with EPA's April 30, 1999 Draft *Periodic Monitoring Technical Reference Document*.

- (1) Initial compliance. The Puget Sound Clean Air Agency has not observed visible emissions from these activities during any inspection, nor has Nucor Steel; therefore, we conclude that Nucor Steel is generally in compliance with the opacity requirements. The Puget Sound Clean Air Agency has observed visible emissions from fugitive dust sources like truck traffic and scrap processing, but these activities are addressed elsewhere in the permit and have a higher frequency of monitoring.
- (2) Margin of compliance. The monitoring method is designed so that the source will take corrective action before a violation occurs. The emission units are unlikely to generate visible emissions except under the most unusual circumstances. In addition, the Puget Sound Clean Air Agency has inspected this facility at least annually since 1992 and has not identified opacity issues; therefore, the Puget Sound Clean Air Agency has determined that quarterly monitoring is adequate except as provided for under specific emission unit monitoring requirements. Recording of visible emissions is not necessarily a deviation of the opacity requirements. However, failure to take timely corrective action, as defined by the monitoring method, is a deviation of the specific permit term. Taking corrective action does not relieve Nucor Steel from the obligation to comply with the opacity requirement itself. If the Reference Test Method indicates that the opacity emissions are above 20% for more than 3 minutes in an hour, Nucor Steel would have to report an emission deviation under Section V.R. of the permit.

- (3) Variability of process and emissions. With scheduled downtime and production fluctuations, emissions from Nucor Steel are intermittent but are relatively constant on a yearly basis. Emissions from material transfer, including raw material loading into silos, generate fine particulate emissions in the form of carbon and lime dust as the material is loaded into and transferred out of the holding silos. Natural gas combustion yields virtually no particulate emissions. All such activities are either vented to high-efficiency filters or combust natural gas which rarely cause visible emissions when maintained in accordance with the Operation and Maintenance (O & M) Plan. While these particulate emissions are minimal after filtration and combustion, they are the most likely sources of visible emissions. The most significant variable affecting emissions would be the degree to which Nucor Steel follows its O & M Plan.
- (4) Environmental impacts of problems. Observed opacity is generally related to emissions of particulate matter. Minor emitting stacks at Nucor Steel combined normally emit less than a ton of particulate per year. Particulate emissions from non-meltshop natural gas combustion are about two tons per year. A maintenance problem is unlikely to result in emissions that would have a significant environmental impact.
- (5) Technical considerations. Catastrophic failure of a dust collector, filtration system or significant malfunction of a natural gas-fired furnace or heating unit are the only likely causes of an opacity standard deviation at Nucor Steel. Nucor Steel is required to inspect all dust collectors once per quarter, thereby minimizing the chance of a catastrophic filtration system failure. Uncontrolled heating furnaces or other heating units at Nucor Steel can only be fired on natural gas, and in accordance with an acceptable O & M Plan, thereby minimizing the probability of an opacity standard violation.

2. Requirements I.A.3 and I.A.4 (PM₁₀)

Puget Sound Clean Air Agency Regulation I, Section 9.09 limits particulate emissions to 0.05 grain per dry standard cubic foot (gr/dscf) from equipment used in a manufacturing process. WAC 173-400-060 limits particulate emissions to 0.1 gr/dscf from general process units (i.e., units using a procedure or a combination of procedures for the purpose of causing a change in material by either chemical or physical means, excluding combustion).

The Puget Sound Clean Air Agency has determined that the monitoring should be quarterly, employing the same monitoring method at the same frequency as the opacity requirements in Requirement I.A.2. The monitoring method is based on the fact that particulate emissions less than 0.05 gr/dscf usually do not result in visible emissions. These factors are consistent with EPA's April 30, 1999 Draft *Periodic Monitoring Technical Reference Document*.

3. Requirement I.A.5 (PM₁₀ from combustion sources)

WAC 173-400-050(1) limits particulate emissions to 0.1 gr/dscf corrected to 7% O₂ from all combustion units, including both internal and external combustion units. There are SIP approved, federally enforceable, and newer, non-SIP-approved, non-federally enforceable versions of WAC 173-400-050(1). The requirements are, for all practical intents and

purposes, identical, with identical monitoring methods. While the Puget Sound Clean Air Agency requirement only allows one-half the particulate matter concentration allowed by Ecology, both require the measured particulate matter concentration to be corrected to 7% oxygen. These requirements apply to all of Nucor Steel's combustion units, items such as space heaters and water heaters. Since Nucor Steel burns only pipeline grade natural gas, it is incapable of violating this standard while complying with the other requirements in the permit. Therefore, the permit does not contain additional monitoring requirements other than facility-wide monitoring.

4. Requirement I.A.6 (SO₂)

Both Puget Sound Clean Air Agency Regulation I, Section 9.07 and WAC 173-400-040(6) are equivalent requirements (SO₂ emissions not to exceed 1000 ppmv), except for the second paragraph of the WAC, which is not in the Puget Sound Clean Air Agency regulation. That paragraph, which is not federally enforceable, allows for exceptions to this requirement if the source can demonstrate that there is no feasible method of reducing the SO₂ concentrations to 1000 ppm. Since the Puget Sound Clean Air Agency rules do not allow the exception, the second paragraph does not apply to Nucor Steel.

In the combustion units, Nucor Steel can only burn pipeline quality natural gas and propane. "Natural gas" means a mixture of gaseous hydrocarbons, with at least 80 percent methane (by volume), and of pipeline quality, such as the gas sold or distributed by any utility company regulated by the Washington Utilities and Transportation Commission. Natural gas may also be referred to as "pipeline quality natural gas." Nucor Steel receives the same natural gas as all of the other natural gas consumers, private and industrial, in the Northwest. According to Section 1.4-3 of AP-42, natural gas contains approximately 2000 grains of sulfur per million cubic feet, which is equivalent to approximately 3.4 parts of sulfur per million cubic feet of natural gas, as shown in the following calculation:

$$\frac{2,000 \text{ gr S}}{1,000,000 \text{ ft}^3 \text{ nat. gas}} \times \frac{1 \text{ lb}}{7000 \text{ gr}} \times \frac{385 \frac{\text{ft}^3}{\text{mole S}}}{32 \frac{\text{lb}}{\text{mole S}}} = 3.44 \times 10^{-6} \frac{\text{ft}^3 \text{ S}}{\text{ft}^3 \text{ nat. gas}} \equiv 3.44 \text{ ppm} \text{ dv S}$$

According to *Perry's Chemical Engineer's Handbook*, each cubic foot of natural gas requires approximately 10 cubic feet of air for combustion, yielding approximately 11 cubic feet of combustion exhaust gases, consisting mostly of nitrogen, water vapor, and carbon dioxide. The sulfur in the natural gas will almost all be converted to sulfur dioxide, with each cubic foot of sulfur producing the same volume of sulfur dioxide. Since each cubic foot of natural gas contains 4.08×10^{-5} cubic foot of sulfur, each cubic foot of stack exhaust will contain approximately:

$$3.44 \times 10^{-6} \frac{\text{ft}^3 \text{ S}}{\text{ft}^3 \text{ nat. gas}} \times \frac{1 \text{ ft}^3 \text{ SO}_2}{1 \text{ ft}^3 \text{ S}} \times \frac{1 \text{ ft}^3 \text{ nat. gas}}{11 \text{ ft}^3 \text{ stack exhaust}} = 3.13 \times 10^{-7} \frac{\text{ft}^3 \text{ SO}_2}{\text{ft}^3 \text{ stack exhaust}}$$

This is equivalent to 0.31 ppmv SO₂. Note that this estimated value is less than one-tenth of one percent of the 1,000 ppm SO₂ standard. Therefore, it is reasonable to assume that combustion units that are fired on natural gas cannot exceed the 1,000 ppm SO₂ limits in Puget Sound Clean Air Agency Regulation I, Section 9.07 and WAC 173-400-040(6). The other emission units are not capable of generating SO₂ emissions as permitted. Therefore, the permit does not contain monitoring requirements. Nucor Steel may burn propane as an alternate to gas. This fuel has a similarly low SO₂ concentration.

5. Requirement I.A.7 (HCl)

Puget Sound Clean Air Agency Regulation I, Section 9.10 specifies that HCl emissions shall not exceed 100 ppm (dry), corrected to 7% O₂ for combustion sources, including both internal and external combustion units. Since Nucor Steel burns only pipeline-grade natural gas, the facility is incapable of violating the standard while complying with the other requirements in the permit. Therefore, the permit does not contain additional monitoring requirements.

6. Requirements I.A.8 and I.A.9 (nuisance)

Puget Sound Clean Air Agency Regulation I, Section 9.11(a) and WAC 173-400-040(5) are similar requirements that address emissions that may be environmentally detrimental or cause a nuisance. WAC 173-400-040(5) has SIP-approved and non-SIP approved versions that are virtually identical. Puget Sound Clean Air Agency Regulation I, Section 9.11 has not been adopted into the SIP. The monitoring method for all these requirements is based on responding to complaints and general inspections of the facility to identify any emissions that are likely to be injurious to human health, plant or animal life, or property, or that unreasonably interfere with enjoyment of life and property. Therefore, the Puget Sound Clean Air Agency has determined that complaint response requirements in Section II.A.1(b) and the quarterly facility-wide inspections required in Section II.A.1(c) of the permit are sufficient to monitor for changes that would cause a fugitive emission or unexpected buildup of dust on the roadways and plant grounds.

Puget Sound Clean Air Agency Regulation I, Section 9.11(b) (non-Federally enforceable) and the WAC 173-400-040(4) address odors. The monitoring method is based on responding to complaints, quarterly inspections of the facility to identify emissions of odor-bearing contaminants and correcting any problems identified as a result of the inspection or investigation. Receiving complaints does not necessarily mean Nucor Steel is in violation of this requirement, since the regulation does not prohibit the emission of odors, but prohibits the emissions of odors if good practices are not employed to control emissions. Nucor Steel does not generally emit odors that would cause a complaint. Complaints will trigger action by Nucor Steel to investigate and correct problems that could result in a violation.

The Puget Sound Clean Air Agency has determined that the monitoring should be quarterly for the reasons listed below. These factors are consistent with EPA's April 30, 1999 Draft *Periodic Monitoring Technical Reference Document*.

- (1) Initial compliance. The Puget Sound Clean Air Agency has received minimal

complaints regarding fugitive dust or odor emissions over the past five years, and has not observed visible or odorous emissions from plant activities during any inspection, therefore, we conclude that it is generally in compliance with the nuisance requirements.

- (2) Margin of compliance. The emission of fugitive dust or odor is unlikely to generate off-site fallout or complaints except under the most unusual circumstances. The monitoring method is designed so that the source will take corrective action before a violation occurs. In addition, in the past six years the Puget Sound Clean Air Agency has not noted nor received complaints about Nucor Steel causing emissions that are likely to be injurious to health, plant or animal life, or property or that unreasonably interfere with enjoyment of life and property. Therefore, the Puget Sound Clean Air Agency has determined that quarterly monitoring is adequate. Receiving complaints does not necessarily mean Nucor Steel is in violation of this requirement, but Nucor Steel has a responsibility to investigate complaints and take corrective action if necessary. Failure to take timely corrective action, as defined by the monitoring method, is a deviation of the specific permit term. Taking corrective action does not relieve Nucor Steel from the obligation to comply with the nuisance requirement itself.
- (3) Variability of process and emissions. With scheduled downtime and production fluctuations, emissions of a pollutant that could cause a potential nuisance could occur intermittently around the clock. Annual production rates vary significantly and annual emissions from Nucor Steel are generally proportionate to production rates. The raw materials handling systems generate fine particulate that is handled by small dust collectors. Trucks traveling on plant roads and raw materials unloading may generate fugitive particulate emissions. All such activities are controlled by watering, sweeping, vacuuming or high-efficiency dust collectors, that are maintained in accordance with the O & M Plan. The most significant variable affecting emissions would be the degree to which Nucor Steel follows its O & M Plan.
- (4) Environmental impacts of problems. Nuisance emissions are generally related to fugitive emissions of particulate matter. While emissions of fugitive dust are minimal, this type of emission is also not quantifiable. A maintenance problem is unlikely to result in emissions that would have a significant environmental impact.
- (5) Technical considerations. Catastrophic failure of a silo dust collector or significant malfunction of watering nozzles or watering trucks are the only likely causes of a nuisance causing deviation at Nucor Steel. Nucor Steel is required to inspect all sources of fugitive dust at least weekly, thereby minimizing the chance of generating emissions that may cause a nuisance. Upset emissions of nuisance-causing particulate or odor-bearing contaminants at Nucor Steel are handled more frequently on an as-needed basis and in accordance with "Complaint Monitoring" procedures and the O & M Plan. This minimizes the probability of causing an emission that could be injurious to health, plant or animal life, or property or that unreasonably interfere with enjoyment of life and property.

7. Requirements I.A.10, I.A.11, I.A.12, and I.A.13 (fugitive particulate emissions)

WAC 173-400-040(3) addresses fugitive dust emissions for some activities, and WAC 173-400-040(8) requires reasonable precautions or reasonably available control technology (RACT) to control fugitive emissions. Puget Sound Clean Air Agency Regulation I, Section 9.15 requires the use of reasonable precautions for fugitive dust and lists some examples of reasonable precautions. Monitoring, maintenance and recordkeeping methods II.A.1(b) through II.A.2.(f) are used to monitor for fugitive dust. Method II.A.1(b) describes complaint response requirements, and all the rest of the methods involve periodic monitoring for visible emissions.

NOC Order of Approval 9669 requires Nucor to regularly wet down paved roads and to spray water on the scrap yard (Conditions 10 and 11, contained in AOP Requirements I.A.12 and I.A.13, respectively). The NOC used the exact wording that is contained in Sections II.A.1(e) and (f) of the AOP as monitoring methods for Requirements I.A.12 and I.A.13.

The Puget Sound Clean Air Agency has determined that the weekly fugitive dust inspections required in Sections II.A.1(b) through (f) of the permit are sufficient to monitor for changes that would cause a fugitive emission or unexpected buildup of dust on the roadways and parking lots. The monitoring method is based on visual inspections with Nucor Steel taking corrective action within 24 hours if any fugitive dust emissions are noted. The monitoring method is consistent with Puget Sound Clean Air Agency's "*Agency Policy on Fugitive Dust Controls, March 1995*," which specifies reasonable precautions that must be taken to prevent fugitive dust emissions, but does not necessarily define BACT for all processes.

The Puget Sound Clean Air Agency has determined that monitoring should be weekly for the reasons listed below. These factors are consistent with EPA's April 30, 1999 Draft *Periodic Monitoring Technical Reference Document*.

- (1) Initial compliance. The Puget Sound Clean Air Agency documented fugitive dust emissions from the plant grounds six years ago, and Nucor Steel has stepped up a monitoring program to deal with these emissions on a regular basis. Nucor Steel now employs BACT for dust emissions from truck traffic, scrap unloading and for smoke and dust emissions from slag handling in the scrap yard. Fugitive dust from these processes is controlled with regular watering, sweeping and vacuuming, and slag processing is conducted indoors. Here, Nucor Steel employs BACT by using water mist to arrest any visible emissions. The Puget Sound Clean Air Agency has not observed fugitive emissions during any inspection in the past six years, nor has Nucor Steel; therefore, we conclude that it is generally in compliance with this requirement.
- (2) Margin of compliance. For known sources of potential fugitive dust, the buildings at Nucor Steel are enclosed and most of the roadways and parking lots are paved and are maintained in a clean state. Nucor Steel controls fugitive emissions generated by material transfer in the scrap yard by constant water spray. Nucor Steel is currently

completing a project to have all plant areas paved. Emission Unit No. 2 addresses opacity monitoring from fugitive meltshop emissions, and most significant air pollution generating equipment has air pollution control devices and is inspected by Nucor Steel daily. In addition, Nucor Steel performs facility-wide inspections quarterly, so there is a good margin for compliance.

- (3) Variability of process and emissions. BACT for controlling fugitive dust at the Nucor Steel facility consists primarily of managing mud and dirt deposition on roads and keeping raw materials piles damp. Nucor Steel uses its judgment and experience to avoid generating fugitive dust. Generally, Nucor Steel maintains potential fugitive dust emitting materials in a damp state, and cleans all roadways leading to processing areas as needed to avoid generating fugitive dust. Therefore, process and emission variability is minimized. Variation of employing dust-arresting techniques as described in Nucor Steel's O & M Plan could cause fugitive emissions but is addressed elsewhere in the permit. The most significant variable affecting emissions would be the degree to which Nucor Steel follows its O & M Plan.
- (4) Environmental impacts of problems. Because Nucor Steel employs BACT for fugitive dust control as specified in its O & M Plan, insignificant environmental impacts are expected. A lapse in fugitive dust abatement techniques is unlikely to result in emissions that would have a significant environmental impact.
- (5) Technical considerations. Nucor Steel follows a good O & M Plan to maintain facility-wide control of fugitive dust that allows the identification and correction of potential fugitive dust problems that does not represent BACT. Nucor Steel is required to inspect all areas of the plant that could emit fugitive dust once each week, thereby minimizing the chance of a catastrophic fugitive emission.

8. Requirement I.A.14 (maintain equipment)

Puget Sound Clean Air Agency Regulation I, Section 9.20 requires Nucor Steel to maintain equipment in good working order. Section 9.20(a) applies to sources that received a Notice of Construction Order of Approval under Puget Sound Clean Air Agency Regulation I, Article 6. Section 9.20(b) applies to equipment not subject to Section 9.20(a). Section II.A of the permit identifies the minimum monitoring criteria for maintaining equipment in good working order. The section identifies both facility-wide criteria and specific criteria for the emission units and activities. In addition, the facility-wide inspections provide monitoring of the general effectiveness of Birmingham Section II.A as the monitoring method because many parts of Section II.A apply to several emission units and activities. Where there are specific monitoring requirements for specific emission units, the Puget Sound Clean Air Agency has listed them in Section II.A.2. The Puget Sound Clean Air Agency has determined that following the requirements of Section II of the permit provides sufficient monitoring criteria to certify that the equipment has been maintained in good working order. However, the Puget Sound Clean Air Agency reserves the right to evaluate the maintenance of each piece of equipment to determine if it has been maintained in good working order.

9. Requirement I.A.15 (O & M plan)

In accordance with Puget Sound Clean Air Agency Regulation I, Section 7.09(b), Nucor Steel is required to develop and implement an O & M Plan to assure continuous compliance with Puget Sound Clean Air Agency Regulations I, II and III. The requirement specifies that the plan shall reflect good industrial practice, but does not define how to determine good industrial practice. To clarify the requirement, Puget Sound Clean Air Agency added that in most instances following the manufacturer's operations manual or equipment operational schedule, minimizing emissions until the repairs can be completed and taking measures to prevent recurrence of the problem may be considered good industrial practice. This language is consistent with a Washington Department of Ecology requirement in WAC 173-400-101(4). The Puget Sound Clean Air Agency also added language establishing criteria for determining if good industrial practice is being used. These may include, but are not limited to, monitoring results, opacity observations, review of operations and maintenance procedures, and inspections of the emission unit or equipment. The Puget Sound Clean Air Agency added this wording in response to Washington State court decision, Longview Fibre Co. v. DOE, 89, Wn. App. 627 (1998), which held that similar wording was not vague and gave sufficient notice of the prohibited conduct. Puget Sound Clean Air Agency Regulation I, Section 7.09(b) also requires Nucor Steel to promptly correct any defective equipment. However the underlying requirement in most instances does not define "promptly"; hence for significant emission units and applicable requirements that Nucor Steel has a reasonable possibility of violating or that a violation would cause an air quality problem, the Puget Sound Clean Air Agency added clarification that "promptly" usually means within 24 hours. For many insignificant emission units and equipment not listed in the permit, the meaning of "promptly" will vary because the emission sources and suitable pollution control techniques vary widely, depending on the contaminant sources and the pollution control technology employed. However, the permit identifies a means by which to identify if Nucor Steel is following good industrial practice.

As described in Section V.R, Nucor Steel must report to the Puget Sound Clean Air Agency any instances where it failed to promptly repair any defective equipment. In addition, Nucor Steel has the right to claim certain problems were a result of an emergency (Section V.T) or unavoidable (Section V.U).

Following these requirements demonstrates that Nucor Steel has properly implemented the O & M Plan, but it does not prohibit the Puget Sound Clean Air Agency or EPA from taking any necessary enforcement action to address violations of the underlying applicable requirements after proper investigation.

10. Requirement I.A.16

RCW 70.94.040 is similar to Puget Sound Clean Air Agency Regulation I, Section 9.11 and is listed separately here because it is not a federally enforceable requirement.

C. Section EU-1: Electric Arc Furnaces

Puget Sound Clean Air Agency Regulation I, Section 9.03 applies to this emission unit, but the opacity standard in 40 CFR Part 60, Section 60.272a(2) and (3) is more stringent. Therefore, Nucor Steel does not have to monitor for compliance with Section 9.03 while complying with 40 CFR Part 60, Section 60.272a(2) and (3). However, if Nucor Steel is above any opacity standard in 40 CFR Part 60, Section 60.272a, it must also document if it is above the opacity standard in Regulation I, Section 9.03 by employing the reference test method, WDOE Method 9A, to determine compliance.

Conditions No. 3 and No. 4 of Puget Sound Clean Air Agency Order of Approval No. 9669, which supersedes and terminates Orders of Approval No. 5690, 5710, 8433, and 9089, impose PM₁₀ emission caps on Nucor Steel of 7.93 lb/hr and 7.14 lb/hr from the low temperature and high-temperature baghouses, respectively. Nucor Steel has demonstrated compliance with the terms of this Order. Annual source testing for PM₁₀, combined with routine inspections and maintenance on the baghouses, is sufficient to demonstrate ongoing compliance.

Conditions No. 6 and No. 7 of Puget Sound Clean Air Agency Order of Approval No. 9669 impose NO_x and CO emission limits on Nucor Steel. These limits are set at 0.480 pounds NO_x per ton steel and 1.98 pounds CO per ton steel. Nucor Steel has past source tests which demonstrate compliance with these limits. In addition, Order of Approval 9669 requires annual source testing of NO_x and CO. This testing regime is deemed to be sufficient to demonstrate ongoing compliance.

PSD 07-02 also limits air emissions from Nucor Steel by capping production to 1.1 million tons of billets during any 12 month period. The PSD requires that Nucor Steel record the tons of billets produced on a monthly basis and calculate the 12-month running total of billet produced for each rolling 12 month period. The monitoring method requires Nucor Steel to file semiannual reports of the tons of billets produced with the Puget Sound Clean Air Agency within 30 days after the end of the period for which the report is being written.

RCW 70.94.152(7) is similar to Puget Sound Clean Air Agency Regulation I, Section 9.20 and is listed separately here because it is not a federally enforceable requirement.

D. Section EU-2: Meltshop Combustion Sources

Puget Sound Clean Air Agency Regulation I, Section 9.03 applies to this emission unit. Daily visual opacity observations required in Section II.A.(2)(c), taken directly from the monitoring requirement in 40 CFR 60.273a(d) and 40 CFR 276a(g) are used to reasonably assure continuous compliance.

Both Puget Sound Clean Air Agency Regulation I, Section 9.07 and WAC 173-400-040(6) are equivalent requirements. No equipment in this emission unit has the capability to burn any fuel other than natural gas or propane; therefore, it cannot exceed the SO₂ limit.

Puget Sound Clean Air Agency Regulation I, Section 9.09 and WAC 173-400-050(1) apply to this emission unit. Daily visual opacity observations required in Section II.A.(2)(c) are used to reasonably assure continuous compliance.

RCW 70.94.152(7) is similar to Puget Sound Clean Air Agency Regulation I, Section 9.20 and is listed separately here because it is not a federally enforceable requirement.

E. Section EU-3: Reheat Furnace

Condition No. 4 of Puget Sound Clean Air Agency Order of Approval No. 4492 (issued on June 16, 1992) imposes a 0.25 lb/MMBtu limit on NO_x emissions from the Bricmont reheat furnace stack. The Puget Sound Clean Air Agency has determined that there should be no monitoring for the reasons listed below. These factors are consistent with EPA's April 30, 1999 Draft *Periodic Monitoring Technical Reference Document*.

- (1) Initial compliance. Nucor Steel demonstrated compliance with this requirement during the required source test in 1995; therefore, Puget Sound Clean Air Agency concludes that Nucor Steel complies with the Order of Approval NO_x limit.
- (2) Margin of compliance. During a requisite source test required by the Order of Approval, Nucor Steel emitted NO_x emissions at 68 percent of the allowable limit.
- (3) Variability of process and emissions. Aside from scheduled downtime and production fluctuations, emissions from the reheat furnace are relatively constant. Nucor Steel has not changed the type of fuel it uses for combustion, nor has it increased the heat input rating of the reheat furnace. The most significant variable affecting emissions would be the degree to which Nucor Steel follows its O & M Plan.
- (4) Environmental impacts of problems. Emissions of NO_x are generally related to emissions of particulate matter. The reheat furnace at Nucor Steel normally emits 60 to 70 tons of NO_x per year. A maintenance problem is unlikely to result in emissions that would have a significant environmental impact.
- (5) Technical considerations. Catastrophic failure of the reheat furnace is the only likely cause of a NO_x limit deviation at Nucor Steel. Nucor Steel is required to perform routine maintenance, thereby minimizing the chance of a catastrophic filtration system failure. The most significant variable affecting emissions would be the degree to which Nucor Steel follows its O & M Plan.

The federally enforceable SIP-approved and non-SIP approved versions of Puget Sound Clean Air Agency Regulation I, Section 9.09 limit particulate emissions to 0.05 gr/dscf corrected to 7% oxygen from fuel burning equipment. They are identical. However, the reheat furnace burns natural gas, and could burn propane. It can be shown that the latter fuel has similarly low particulate rates. The Puget Sound Clean Air Agency has determined that the monitoring should be quarterly for the same reasons listed under Requirements I.A.1 and 1.A.16 above,

as opacity and particulate emissions are related. These factors are consistent with EPA's April 30, 1999 Draft *Periodic Monitoring Technical Reference Document*.

- (1) Initial compliance. The Puget Sound Clean Air Agency has not observed visible emissions from the reheat furnace during any inspection, nor has Nucor Steel; therefore, we conclude that Nucor Steel complies with the particulate matter requirements.
- (2) Margin of compliance. The emission units are unlikely to generate particulate matter emissions except under the most unusual circumstances. The monitoring method is designed so that Nucor Steel will take corrective action before a violation occurs. In addition, the Puget Sound Clean Air Agency has inspected the reheat furnace at least annually since 1992 and has not identified opacity or particulate matter issues; therefore, the Puget Sound Clean Air Agency has determined that quarterly monitoring is adequate. Recording of visible emissions is not necessarily a deviation of the particulate requirements. However, failure to take timely corrective action, as defined by the monitoring method, is a deviation of the specific permit term. Taking corrective action does not relieve Nucor Steel from the obligation to comply with the particulate requirement itself.
- (3) Variability of process and emissions. Except for scheduled downtime and production fluctuations, particulate emissions from natural gas combustion in the reheat furnace are relatively constant. Natural gas combustion yields virtually no particulate emissions when the furnace is maintained in accordance with the O & M Plan. The most significant variable affecting emissions would be the degree to which Nucor Steel follows its O & M Plan.
- (4) Environmental impacts of problems. Observed opacity is generally related to emissions of particulate matter. Particulate emissions from natural gas combustion at the reheat furnace stack normally are less than two tons per year. A maintenance problem is unlikely to result in emissions that would have a significant environmental impact.
- (5) Technical considerations. Catastrophic failure or some other significant malfunction of oxygen feed to the burners are the only likely causes of opacity from the reheat furnace and, indirectly, a particulate matter standard deviation at Nucor Steel. The reheat furnace can only be fired on natural gas, and in accordance with an acceptable O & M Plan. Nucor Steel is required to read opacity once per quarter, thereby minimizing the chance of a catastrophic system failure.

RCW 70.94.152(7) is similar to Puget Sound Clean Air Agency Regulation I, Section 9.20 and is listed separately here because it is not a federally enforceable requirement.

VII. MONITORING, MAINTENANCE AND RECORDKEEPING PROCEDURES

A. Monitoring requirements carried over from original permit

Nucor Steel must follow the procedures contained in Section II of the permit, Monitoring, Maintenance and Recordkeeping Procedures. Failure to follow a requirement in Section II may not necessarily be a violation of the underlying applicable emission standard in Section I. However, not following a requirement of Section II is a violation of Section II and Nucor Steel must report such violations, as well as violations or deviations from any other permit condition, as a deviation under Section V.R.2 of the permit. In addition, all information collected as a result of implementing Section II can be used as credible evidence under Section V.O.1 of the permit. Reporting a permit deviation and taking corrective action does not relieve Nucor Steel from its obligation to comply with the underlying applicable requirement. According to WAC 173-401-615 (3)(b), Nucor Steel must report a deviation from permit requirements within 30 days after the end of the month in which it is discovered. In this context, any exceedances and excesses that must be reported semiannually elsewhere (as in 40 CFR Section 60.276a(b)(c)&(g)) also have to meet this schedule.

A standard Puget Sound Clean Air Agency Notice of Construction (NOC) Approval condition, NOC Condition No. 1, requires that the equipment, device or process be installed according to plans and specifications submitted to the Puget Sound Clean Air Agency. Once the equipment is installed, the Puget Sound Clean Air Agency requires certification by the applicant that the installation was as approved; this is usually done with a Notice of Completion. Normally within six months to a year after receiving a Notice of Completion, a Puget Sound Clean Air Agency inspector verifies by inspection that the equipment was installed as specified and in accordance with the Approval Order. While the Notice of Completion is a one-time requirement that Nucor Steel has complied with, Nucor Steel cannot change the approved equipment in such a manner that requires an NOC without first obtaining an NOC approval which is addressed in Section IV.A of the permit. In most cases, once Nucor Steel has filed the Notice of Completion and a Puget Sound Clean Air Agency inspector has verified that the equipment was installed according to the Approval Order, the Puget Sound Clean Air Agency considers NOC Condition No. 1 an obsolete condition. However, in some cases in the permit the Puget Sound Clean Air Agency has identified a need to specify that the equipment cannot be altered in such a manner that requires an NOC Approval.

The permit requires Nucor Steel to conduct quarterly facility-wide inspections. These inspections are to include checking for prohibited activities under Section III of the permit and activities that require additional approval under Section IV of the permit, as well as checking for any “nuisance” odor bearing contaminants. The Puget Sound Clean Air Agency determined the frequency of these inspections after considering the potential for emissions, the lack of federally required monitoring, Nucor Steel in-house training practices and similar

factors. If problems are identified, Nucor Steel has the responsibility to not only correct the specific problem, but also to adjust the work practices and training to prevent future problems.

For fugitive dust monitoring, Puget Sound Clean Air Agency employed three methods to monitor compliance at Nucor Steel. Together, they effectively reinforce that BACT is being administered. This is very important at a source like Nucor Steel that may have potential for unknown sources of fugitive dust. In addition to directly monitoring weekly for known fugitive dust sources, performing quarterly inspections of all potential sources via the “complaint” and “facility-wide” monitoring methods is the easiest way to monitor for unidentified sources of fugitive dust.

In determining the appropriate monitoring frequencies for monitoring identified in Section II.A of the permit, the Puget Sound Clean Air Agency considered several factors, including the following:

- Nucor Steel’s compliance history and the likelihood of violating the applicable requirement,
- The complexity of the emission unit including the variability of emissions over time,
- The likelihood that the monitoring would detect a compliance problem,
- The likely environmental impacts of a deviation,
- Whether add-on controls are necessary for the unit to meet the emission limit,
- Other measures that Nucor Steel may have in place to identify problems,
- The type of monitoring, process, maintenance, or control equipment data already available for the emissions unit,
- The technical and economic considerations associated with the range of possible monitoring methods, and
- The type of monitoring found on similar emissions units.

B. Compliance Assurance Monitoring (new requirement)

1. The CAM rule (40 CFR 64)

The CAM rule requires owners and operators to monitor the operation and maintenance of their control equipment so that they can evaluate the performance of their control devices and report whether or not their facilities meet established emission standards. If owners and operators of these facilities find that their control equipment is not working properly, the CAM rule requires them to take action to correct any malfunctions and to report such instances to the appropriate enforcement agency (i.e., State and local environmental agencies).

Additionally, the CAM rule provides some enforcement tools that will help State and local environmental agencies require facilities to respond appropriately to the monitoring results and improve pollution control operations.

The CAM rule applies at major sources with emission units that have control devices, and emissions from the emission unit could exceed 100 tons per year if the control device was not operated.

Nucor is a major source, so the CAM rule can apply. There are several emission units at the facility, but only the electric arc furnace has a control device (two parallel baghouses) with pre-control device potential to emit greater than 100 tons per year:

- (3) Furnace
 - #1 Custom Fuchs High Impedance Elec Arc 3200 Deg F
 - Rated: 125 Ton/Hr Year Installed: 1995 NC/NOT #: 8433
 - CE (1) Baghouse
 - Arc Furnaces 14 Compartments Residual Smoke Melt S
 - Rated: 500000 CFM Year Installed: 1992 NC/NOT #: 8433
 - CE (2) Baghouse
 - Baumco 180f. Withdraws From 4th Hole Duct&Canopy/R
 - Rated: 800000 CFM Year Installed: 1992 NC/NOT #: 8433

The baghouses control PM₁₀. In 2003, PM₁₀ emissions were 20.9 tons. If the baghouses are 99.5% effective, the pre-control PM₁₀ emission rate of the EAF would be 4,173 tons. According to 40 CFR 64.5(b), the Nucor EAF is classified as a as an “other pollutant-specific emission unit.” An “other pollutant-specific emission unit” CAM emission unit is one that has a potential to emit more than 100 tons per year of a pollutant *without* the control device, but has the potential to emit less than 100 tons per year of that same pollutant *with* the control device. The CAM rule requirements apply to “other pollutant-specific emission units” upon air operating permit renewal.

Nucor submitted a CAM plan with its air operating permit renewal application. The plan was reviewed by the Puget Sound Clean Air Agency and found to satisfy the requirements of 40 CFR 64. The CAM plan was subsequently incorporated into the air operating permit and can be found in new Section II.C.

The CAM Plan uses existing monitoring activities, specifically those found in Sections II.A.2(b) *Baghouse opacity monitoring* and (d) *Baghouse operation monitoring*. Additional features of the Compliance Assurance Monitoring rule, such as *Response to an excursion*, *Quality Improvement Plan (QIP)*, and *CAM reporting and recordkeeping* have been incorporated into the AOP.

VIII. PROHIBITED ACTIVITIES

Some of the requirements Nucor Steel identified in the operating permit application are included in Section III as prohibited activities. Since these activities are prohibited, routine monitoring of parameters is not appropriate. Instead, Puget Sound Clean Air Agency has listed these activities in this section to highlight that they cannot occur at the facility.

Puget Sound Clean Air Agency Regulation I, Section 9.13 and WAC 173-400-040(7) contain similar requirements addressing concealment and masking of emissions. Although both requirements apply, the permit language has been simplified by grouping these requirements together.

IX. ACTIVITIES REQUIRING ADDITIONAL APPROVAL

Some of the requirements Nucor Steel identified in the operating permit application are included in Section IV as activities that require additional approval. For new source review, the permit language has been simplified. Both the state (WAC 173-400-110 and Chapter 173-460 WAC) and Puget Sound Clean Air Agency (Regulation I, Article 6) new source review programs require approval to construct, install, establish, or modify an air contaminant source. All these requirements apply, but the language in these requirements has been incorporated into one section to simplify the permit language.

X. STANDARD TERMS AND CONDITIONS

Some of the requirements Nucor Steel identified in the operating permit application are included in Section V, Standard Terms and Conditions. This provided a mechanism for describing requirements that are more general in nature. This section also contains the standard terms and conditions specifically listed in WAC 173-401-620.

XI. BASIS FOR INAPPLICABLE REQUIREMENTS

The requirements listed in Section VIII of Nucor Steel's Air Operating Permit do not apply to the facility, or to the specific emissions units listed in the permit for the reasons listed below. The permit shield applies to all requirements so identified.

- Puget Sound Clean Air Agency Regulation I, Section 9.08(a) and RCW 70.94.610 do not apply because Nucor Steel does not have the capability to burn fuel oil.
- WAC 173-490 Emission Standards and Controls for Sources Emitting Volatile Organic Compounds (VOCs) is an inapplicable requirement because Nucor Steel does not conduct any affected activities and must obtain Puget Sound Clean Air Agency approval before conducting any such activity.

- WAC 173-470, 173-474, 173-475, 173-480 and 173-481 are inapplicable requirements by definition in WAC 173-401-200(4)(ix).
- WAC 173-400-040(3)(a) does not apply because no emission units at Nucor Steel are located in a PM10 attainment area. WAC 173-400-040(3)(b) does not apply because no emission units at Nucor Steel have been designated a significant contributor of pollutant to a nonattainment area.
- WAC 173-400-040(8)(b) does not apply because no emission units at Nucor Steel have been designated a significant contributor to a PM-10 nonattainment area.
- WAC 173-400-100 through 104 and Puget Sound Clean Air Agency Regulation I, Article 5 do not apply because WAC 173-400-101(7) and Regulation I, Section 5.03 exempt Title V sources from the registration requirements of the WAC and Regulation I, Article 5.
- WAC 173-400-151 does not apply because Ecology has not identified Nucor Steel as a source that can cause or contribute to visibility impairment in a Class I area.
- 40 CFR Part 60.273a(a) is inapplicable because Section 60.273a(c) waives the requirement for continuous opacity monitoring for sources that perform Method 9 observations.
- 40 CFR 60.273a(e) – (g) and 40 CFR 60.276a(h) are inapplicable because a bag leak detection system is required only for single stack fabric filters, per section 60.273a(e). Nucor's EAF control system does not employ single stacks.
- 40 CFR 60.274a(c) and 40 CFR 60.276a(c) are inapplicable because Section 60.274a(c) gives the affected facility a choice between monitoring control system fan motor amperes and damper positions, or monitoring volumetric flow rate. Nucor chose to monitor fan motor amperes.
- 40 CFR Part 60.274a(b) and (g) are inapplicable because Sections 60.273a(d) and (f) waive the requirement for furnace static pressure monitoring for sources that monitor for shop opacity.
- 40 CFR Part 60.274a(f) is inapplicable because Section 60.273a(d) waives the requirement to install a furnace static pressure monitoring device for sources that monitor for shop opacity.
- 40 CFR 60.276a(b), (c) and (g) require a semi-annual report to EPA of control device opacity exceedances, furnace operating parameter anomalies and shop opacity exceedances. These requirements were made inapplicable by a letter of February 5, 2003 from Betty Weise to Dennis McLerran EPA delegated to the Puget Sound Clean Air Agency the authority to receive all notifications and reports required by NSPS

promulgated prior to July 1, 2002. Condition V.R.1 requires that these reports be filed with PSCAA.

- 40 CFR Part 60 Subpart AA is inapplicable because Nucor Steel did not construct, modify or reconstruct an electric arc furnace between October 21, 1974 and August 17, 1983.

XII. OBSOLETE REQUIREMENTS

Condition 12 of NOC Order of Approval No. 9669 states that NOC No. 9669 supersedes and terminates NOCs 5690, 5710, 8433, and 9089. All conditions from NOCs 5690, 5710, 8433, and 9089 are considered “obsolete requirements” and have been removed from the AOP.

XIII. EXPLANATION OF CHANGES MADE DURING MODIFICATIONS TO THE AIR OPERATING PERMIT DURING THE COURSE OF PERMIT RENEWAL

On April 29, 2005, Nucor submitted a Title V renewal application for the Nucor Steel facility. The application consisted of a cover letter and critical items required under WAC 173-401-710, such as a compliance plan and certification by the responsible official. On May 3, 2005, the Puget Sound Clean Air Agency sent a letter to Nucor indicating that the renewal application had been found to be complete.

In preparing the air operating permit renewal, the format of the AOP was changed to the latest Agency form, and numerous regulatory references throughout the AOP were updated due to rule changes since the last time the permit was open. Changes involving decisions by the Agency, or that were otherwise substantive, are described below:

A. Changes throughout Section I (tables of requirements)

- The tables in Section I have been changed. Previously, facility-wide requirements and requirements for each emission unit were expressed in two tables each. The first table contained requirements that were in the State Implementation Plan (SIP) and were therefore “federally enforceable,” immediately followed by a second table with the requirements that were “*STATE ONLY*.” Also, there was a rather lengthy notation below each of the old, federally enforceable requirements stating that the requirement would be superseded by the new requirement, once that new requirement was adopted into the SIP. The new table style consolidates the two-table system into a single table for facility wide requirements and for each emission unit requirements. The notations below each of the “dual” requirements have been replaced with a single explanation of the SIP and *STATE ONLY* adoption process and the display conventions used in all the tables. This one-time explanation is contained in the paragraph between the Section I heading and the requirements tables. The *STATE ONLY* requirements are shown with their federally enforceable counterparts, with the dates *italicized*, as shown below:

<u>Reqmt No.</u>	<u>Enforceable Requirement</u>	<u>Adoption or Effective Date</u>	<u>Requirement Paraphrase (Information Only)</u>	<u>Monitoring, Maintenance & Recordkeeping Method</u>
Opacity Standards				
I.A.2	Puget Sound Clean Air Agency Reg I: 9.03 (except for 9.03(e))	3/11/99	Nucor shall not emit any air pollutants which exhibit greater than 20% opacity for a period or periods aggregating more than 3 minutes in any hour	II.A.1(a) Opacity Monitoring
	Puget Sound Clean Air Agency Reg. I: 9.03 (STATE ONLY)	3/25/04		
	WAC 173-400-040(1)	9/23/93		
	WAC 173-400-040(1) (STATE ONLY)	2/10/05		

B. Changes in Facility-wide applicable requirements

- I.A.1 The generic requirement from the very beginning of WAC 173-400-040 was inserted here. This requirement states that all emissions units are required to use, at a minimum, reasonably available control technology (RACT). Also, if two emissions units emit into a single stack, and we can't tell which pollutants are coming from which source, the most restrictive requirements that would apply to the individual emissions units apply to the common stack. The paraphrase of the requirement (column 4 in the table) only discusses the RACT requirement, but the entire requirement applies.
- I.A.16 RCW 70.94.152(7) has been moved from EU-2.7 to I.A.16 because this requirement applies throughout the facility.
- I.A.17 RCW 70.94.040 has been moved from EU-1.13, EU-2.4 and EU-3.3 to I.A.17 because this requirement applies throughout the facility.

C. Changes to Emission Unit #1 (EU-1): Electric Arc Furnace

- EU-1.2, 3, and 4 The reference test method was changed. Parenthesis were removed from the "a" in 40 CFR 60.275a(e)(3).
- EU-1.5, 9 and 10 Compliance Assurance Monitoring requirements in Section II.C. have been added to the monitoring, maintenance and recordkeeping requirements.

D. Changes to Emission Unit #2 (EU-2): Meltshop Combustion Sources

- EU-2.2 (SO₂ standard) was deleted because no monitoring was required, and the only way the meltshop combustion process can generate SO₂ is from combustion of natural gas.

EU-2.3 (PM standard) was deleted because these standards are already included in these I.A Section, and monitoring method is same at for EU-2.1.

EU-2.4 Moved to I.A.17.

E. Changes to Section II

II.A.2(b) The first sentence now states that the observation of opacity from each EAF baghouse, rather than ~~the baghouse~~. The sentence has been added: Where no visible emissions are observed from either baghouse the reader may observe the emissions from both baghouses during the same three 6-minute periods. The adoption date reference for 40 CFR 60.273a(c) has been updated to 2/22/2005.

II.A.2(c) The sentence has been added: Where no visible emissions are observed from either baghouse the reader may observe the emissions from both baghouses during the same three 6-minute periods.

II.C. New section on Compliance Assurance Monitoring (CAM) has been inserted.

F. Changes to Section IV

IV.A.2 Title of the section changed from “New Source Performance Standards” to “Reconstruction of the EAF.”

IV.D The wording from Puget Sound Clean Air Agency Regulation I, Section 9.16 dated 07/12/01 has replaced the older, more paraphrased wording. Nucor had requested that the whole section be removed, but it was left in because it applies.

G. Changes to Section V

V.P(3) New paragraph has been inserted, adding CAM records described in condition II.C.9 to recordkeeping requirements.

V.P(7) This section used to be V.P(6). Wording describing recordkeeping for startups and shutdowns and malfunctions has been targeted more specifically toward the electric arc furnace and associated control equipment.

V.Q. Data recovery requirement is now much shorter, but we now expect data recovery to be 100%, unless specified otherwise in an underlying requirement.

V.R.1 The sentence “For each CAM excursion recorded under Section II.C of the permit the report shall include the information described in Condition II.C.8 of the permit, including any required information on implementation of a QIP” has been inserted. The sentences “A Deviation Report *may* be certified by a responsible official as provided in V.R.4 at the time of submittal; however it is not required to be

certified at the time of submittal. Any Deviation Report *not* certified at the time of submittal must be certified in the semiannual Certification of Reports as per V.R.2” have been added.

H. Changes to VIII. Inapplicable requirements

40 CFR 60.273a(e) – (g) and 40 CFR 60.276a(h) New row stating that bag leak detection system is required only for single stack fabric filters, per section 60.273a(e). Nucor’s EAF control system does not employ single stacks.

XIV. PUBLIC COMMENTS AND RESPONSES DURING RENEWAL PROCESS

A. Comments During the 2006 Public Comment Period

All public comment procedures called for a draft permit in WAC 173-401-800, including publishing of the following notice on the Puget Sound Clean Air Agency web site:

Nucor Steel Seattle, Inc.

Permit #10281

Posted online: 1-24-2006 | Opens: 1-25-2006 | Closes: 2-25-2006

- Overview
 - Puget Sound Clean Air Agency (the Agency) is seeking comments on a draft renewal Air Operating Permit for Nucor Steel, located at 2424 SW Andover Street in Seattle, Washington 98106. Nucor Steel is an iron and steel mill company that releases carbon monoxide, oxides of nitrogen, and particulate matter to the outside air. This draft Air Operating Permit compiles existing air quality requirements into one document and establishes monitoring and recordkeeping to ensure compliance with those requirements. The permit does not affect the type or quantity of air emissions from the facility, and does not authorize any increase in emissions above that already allowed.
- Files available for viewing/downloading as [PDF files](#):
 - [Public Notice](#) [PDF, 77 KB]
 - [Draft Operating Permit](#) [PDF, 213 KB]
 - [Draft Statement of Basis](#)[PDF, 130 KB]
- Technical contact information:
 - [Alan Butler](#)
- General agency contact info:
 - [Find our offices](#)

- o [Main agency numbers](#)

The public comment period has closed, and no comments were received as of February 27, 2006. The permit is being processed for sending to EPA Region X for EPA review, in accordance with WAC 173-401-810.

B. Comments During the 2007 Permit Modification Public Comment Period

NUCOR STEEL SEATTLE INC. CRANE PROJECT

RESPONSE TO PUBLIC COMMENTS

JANUARY 29, 2008

**Agata McIntyre, PE
Steven Van Slyke, PE**

The Puget Sound Clean Air Agency (PS Clean Air) and the Washington Department of Ecology (Ecology) both drafted permits for the proposed Nucor Steel Seattle Inc. (Nucor) crane project. Specifically, PS Clean Air drafted Order of Approval No. 9669 and Air Operating Permit No. 10281, and Ecology drafted Prevention of Significant Deterioration (PSD) permit No. 07-02. A public comment period and hearing were held for these permits. The public comment period ended on January 14, 2008. The public hearing was held on January 9, 2008. Written comments were received throughout the comment period, and verbal comments were received during the hearing. PS Clean Air's detailed response for each



comment is provided below. Ecology has prepared a separate response to the comments received on PSD 07-02.

The final record of our permit decision and responses to comments consists of the following:

1. Final Order of Approval No. 9669
2. Response to Comments
3. Final Engineering Review Worksheet

Copies of the first two items will be sent to all respondents. Paper copies of all three documents may be obtained by contacting PS Clean Air.

WRITTEN COMMENTS

WRITTEN COMMENT 1 (LIZ THOMPSON)

Agata McIntyre

From: Liz Thomson [liz@computersleuth.net]
Sent: Monday, January 14, 2008 9:42 PM
To: Agata McIntyre
Subject: Nucor Steel, Seattle Inc. Proposed Expansion and Increase in AirPollution

To Ms. McIntyre,

We are writing to comment on the approval of the proposed expansion of Nucor Steel's production and resulting increase in air emissions.

People For Puget Sound is a nonprofit, citizens' organization whose mission is to protect and restore Puget Sound and the Northwest Straits, including a specific goal to protect and restore the 2,000 miles of Puget Sound shoreline by 2015.

Nucor Steel appears to be a proactive company that complies with their environmental obligations overall. They also provide a valuable service by recycling metal (including cars and scrap metal) which benefit the environment by reducing the need for additional mining. We feel, however, that the company should be required to reduce their air pollutant load that contributes to an otherwise overtaxed airshed.

As detailed in documents on the Puget Sound Clean Air Agency's web page, Nucor Steel proposes to upgrade one of the existing single hoist cranes to a double hoist crane which will enable them to increase production of steel billets in the meltshop from 795,000 to 1,100,000 tons per year. Although this operational expansion will not increase hourly emission rates, it will allow the facility to operate on a more continuous basis and will increase their overall emissions (emissions per year). Air emissions from the facility come from three areas: the electric arc furnace, natural gas combustion from the ladle preheaters and flying cutting torches, and a reheat furnace. The current and projected emissions from Nucor are:

Constituent Proposed
Current

Particulate matter (PM10) 42.6 32.6 tons per
year

Particulate matter (PM2.5) 11.8 9.7 tons per
year

TSP 86.8
64.1 tons per year

SO2 55.3
39.6 tons per year

NOx 210.4
171.4 tons per year

VOC 33.8 24.7
tons per year

CO 923.8 662.8
tons per year

Lead 0.15
0.11 tons per year

Cadmium 5.15
3.68 pounds per year

Chrome VI 0.23
0.17 pounds per year

Arsenic 0.49 0.35
pounds per year

In addition to the greenhouses gases listed at the top of the table, lead, cadmium, chrome VI and arsenic are highly toxic chemicals that impact both human and wildlife health. Toxic chemicals from this facility may adsorb onto existing particulates in the airshed.

Our comments follow:

1. Cumulative Impact. Puget Sound Clean Air Agency and The Department of Ecology should treat this facility combined with all other industrial facilities emitting pollutants in the Duwamish airshed as a whole. By only looking at each facility individually, the public is deprived of context and information about the total load of toxic pollutants and greenhouses gases in the entire airshed. Nucor alone may be a limited load but each facility's contribution adds up to a large and, we believe, unacceptable load. We request that the total load of toxic chemicals being discharged to the airshed be presented to the public before any additional permits or permit expansions are allowed. We are overdue for this information.

2. Air plume fall-out map. Once again, the public is not shown a map that outlines the area on the ground where pollutants from this facility fall out. This is of concern both for human health reasons (dust and particulate that accumulates on outdoor furniture and pathways and/or that blows into homes and businesses) and for wildlife (the deposited toxic chemicals wash in stormwater into the Duwamish River and Puget Sound). We request that a map be produced and presented to the public.

3. Mitigation. Why is Nucor not being required to improve or increase their stack cleaning devices or otherwise eliminate an increase in contaminants in their air emissions at this time of a requested expansion of pollutant loading?

4. Complete toxics testing. Because the facility is proposing a significant expansion of operations, why are they not being required to conduct a complete sampling and analysis of their air emissions at this time - i.e., full toxic screening? This information should be presented to the public.

This facility and other nearby facilities iteratively increase their operations over time (Nucor last expanded operations in 2005) and yet there is no comprehensive report to the public as to the cumulative and ever-expanding increase in the toxics load in the airshed. It is time for the air and health agencies to become more accountable to the public.

Thank you for the opportunity to comment on the proposed project. Please contact me with questions at (206) 382-7007 X215.

Sincerely,

Liz, Pete and Taylor Ophovens
Citizens who breathe and live in the Georgetown Neighborhood

Comment 1.1: Cumulative impacts:

Agency Response:

PS Clean Air's permit review of a proposed project is guided by the regulatory framework set up for such reviews in the Washington Administrative Code (WAC). The Nucor crane project is a modification to an existing facility. As such, the project is subject to review in accordance with WAC Section 173-400-110(3), which limits review "to the emission unit or units proposed to be added to an existing source or modified and the air contaminants whose emissions would increase as a result of the modification". As required by WAC 173-400-110(3), PS Clean Air limited its review to the increases from this proposed project. Since this project will not increase short term (i.e., hourly or daily) emissions,

only long term (i.e., quarterly and annual) emissions, only long term increases were evaluated. Nucor submitted a detailed analysis of the long term emission increases from this project. These increases were found to be within acceptable levels with regard to ambient air impact criteria.

The desire to evaluate cumulative impacts of multiple sources of pollutants, which must include point sources, area sources, and mobile sources, is not achievable through the review of this one project alone. PS Clean Air is not concluding that such an analysis is unnecessary or undesirable, nor is the Agency concluding air quality improvements in the area are unnecessary. We are only pointing out that such a review cannot be done within the regulatory framework of WAC 173-400-110(3), which guides the NOC review for the Nucor crane project.

Cumulative impacts of air emissions are reviewed by the Washington Department of Health, whose mission is to “protect and improve the health of people in Washington State”. As part of this mission, the Department has been working to quantify and analyze cumulative air emission in various communities. Such analyses include impacts from industrial sources like Nucor. PS Clean Air works cooperatively with the Washington Department of Health on such projects when concerns are identified about communities within the Agency’s jurisdiction. Cumulative impact projects are generally larger in scope than any single project at an industrial facility and reviews of cumulative impacts are done independently from WAC 173-400-110 reviews.

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

Comment 1.2: Air Plume Fall-out Map

Agency Response:

A graphical representation of modeling information is not a requirement to complete the NOC review, and was not provided with Nucor’s application. However, the numerical data used to generate such maps is normally included as part of the NOC application, and was evaluated for this project. As discussed above, the impacts were found to be within acceptable levels with regard to ambient air criteria. This numerical data may be requested by contacting PS Clean Air through the Agency’s website at <http://www.pscleanair.org/contact/reqform.aspx>, or by contacting records administrator Stella Nehen, at 206-689-4011.

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

Comment 1.3: Emission controls and elimination of emission increases

Agency Response:

As discussed in the response to Comment 1.1, emission increases from this project have been evaluated and found to be within acceptable levels with regard to ambient air impact criteria.

PS Clean Air's permit review process includes a review for additional controls on equipment that has been physically modified. Such units are evaluated in a Best Available Control Technology (BACT) analysis. A BACT analysis reviews the technical, energy, environmental, and economic impacts of various potentially available controls, and results in the best control given these factors. The only equipment that is proposed to be physically modified for the Nucor crane project is the crane in the scrap yard. Therefore, a BACT analysis was conducted for the crane. Under the NOC review process, PS Clean Air's authority to require additional controls or an improvement to the existing controls is limited to units that are physically modified.

Our review found that the Nucor scrap yard is currently 60% covered and has a watering system which is used to suppress dust. Additional controls were evaluated as part of the BACT analysis and were found to be either technically or economically infeasible. Therefore, we concluded that BACT for this project is the use of the existing watering system and scrap yard covering.

While PS Clean Air cannot require additional controls or require the facility to eliminate its emission increases if the increases are found to be within acceptable levels with regard to all ambient air impact criteria, Nucor has done numerous projects that surpass the Agency's requirements. These projects include:

- Molten slag handling is done indoors to limit outdoor emissions (slag is a by-product of steel making and is produced during the separation of the molten steel from impurities in the electric arc furnace.) In other areas of the country as well as internationally, hot slag handling can be done outdoors.
- Nucor has installed specially designed bags in its baghouses that have extra re-enforcement to increase the bags' resistance to braking. This design is unique to the Nucor facility. The use of these bags has enabled the facility to operate well below both PS Clean Air's visible and particulate emission permit limits.
- The slag Nucor produces as a by-product in the furnace is sold to the asphalt and cement industry. Use of slag in these industries reduces the need to mine aggregate and serves as a way to recycle a byproduct. In addition, slag use instead of aggregate in the cement industry has been shown to use less energy and emit less carbon monoxide.
- The vast majority of mercury emissions from steel mills like Nucor come from the mercury switches that were once contained in automobiles, a component of scrap that the facility melts to produce its products. Mercury switches were once installed in places like automobile dome lights and trunk lights. (As of 2002, all American made cars are made without mercury switches and imported vehicles stopped including mercury switches 10 years ago.) EPA recently promulgated federal regulations which will require steel mills to insure they are getting their scrap from participants in a

national program to remove mercury switches from old vehicles prior to crushing. Washington has had a voluntary program to remove mercury from vehicles for several years, and Nucor was one of the original supporters of this program. Most of Nucor's scrap steel suppliers already participate in the program. This has helped Nucor reduce mercury emissions ahead of federal mandates.

- Nucor has switched to a Biodiesel blended fuel (B-50) instead of traditional diesel. This reduces the facility's use of petroleum products.
- Nucor's steel manufacturing process uses less energy to produce steel than facilities manufacturing steel from raw ore, resulting in both energy savings and fuel savings.

Conclusion: *PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

Comment 1.4: Toxics testing and cumulative assessment of toxics in airshed

Agency Response:

As discussed in the response to comment 1.1 above, PS Clean Air's NOC review is limited to increases of pollutants from the specific project. Hence, a cumulative assessment was not done.

Since this project will not increase short term (i.e., hourly or daily) emissions, toxics which only have short term standards, known as Ambient Source Impact Limits (ASILs), were not evaluated. The following toxics which have long term ASILs were evaluated: lead, cadmium, hexavalent chromium, arsenic, beryllium, and nickel. Emission increases of each of these pollutants were found to be 10% or less of the ASILs. The calculations submitted by Nucor were based on 2003 and 2004 source tests at the facility. Since emission increases of lead, cadmium, hexavalent chromium, arsenic, beryllium, and nickel were 10% or less of the ASILs, PS Clean Air does not feel that additional testing is needed at this time.

Conclusion: *PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

WRITTEN COMMENT 2 (JENNIFER ROSS)

Clear Day

Page 1 of 2

Agata McIntyre

From: Jennifer Ross [rossj@SMCU.com]
Sent: Monday, January 14, 2008 3:48 PM
To: rhb461@ecy.wa.gov
Cc: Agata McIntyre
Subject: Nucor Steel

To Mr. Hibbard and Ms. McIntyre,

I am a concerned resident of the South Park neighborhood, and I am writing to comment on the approval of the proposed expansion of Nucor Steel's production and resulting increase in air emission. Nucor Steel appears to be a proactive company that complies with their environmental obligations overall. They also provide a valuable service by recycling metal (including cars and scrap metal) which benefit the environment by reducing the need for additional mining. I feel, however, that the company should be required to reduce their air pollutant load that contributes to an otherwise overtaxed airshed.

As detailed in documents on the Puget Sound Clean Air Agency's web page, Nucor Steel proposes to upgrade one of the existing single hoist cranes to a double hoist crane which will enable them to increase production of steel billets in the meltshop from 795,000 to 1,100,000 tons per year. Although this operational expansion will not increase hourly emission rates, it will allow the facility to operate on a more continuous basis and will increase their overall emissions (emissions per year). Air emissions from the facility come from three areas: the electric arc furnace, natural gas combustion from the ladle preheaters and flying cutting torches, and a reheat furnace. The current and projected emissions from Nucor are:

Constituent	Proposed	Current
Particulate matter (PM10)	42.6	32.6 tons per year
Particulate matter (PM2.5)	11.8	9.7 tons per year
TSP	86.8	64.1 tons per year
SO ₂	55.3	39.6 tons per year
NO _x	210.4	171.4 tons per year
VOC	33.8	24.7 tons per year
CO	923.8	662.8 tons per year
Lead	0.15	0.11 tons per year
Cadmium	5.15	3.68 pounds per year
Chrome VI	0.23	0.17 pounds per year
Arsenic	0.49	0.35 pounds per year

In addition to the greenhouses gases listed at the top of the table, lead, cadmium, chrome VI and arsenic are highly toxic chemicals that impact both human and wildlife health. Toxic chemicals from this facility may adsorb onto existing particulates in the airshed.

Comments follow:

1. Cumulative Impact. Puget Sound Clean Air Agency and The Department of Ecology should treat this facility combined with all other industrial facilities emitting pollutants in the Duwamish airshed as a whole. By only looking at each facility individually, the public is deprived of context and information about the total load of toxic pollutants and greenhouses gases in the entire airshed. Nucor alone may be a limited load but each facility's contribution adds up to a large and, we believe, unacceptable load. We request that the total load of toxic chemicals being discharged to the airshed be presented to the public before any additional permits or permit expansions are allowed. We are overdue for this information.

2. Air plume fall-out map. Once again, the public is not shown a map that outlines the area on the ground where pollutants from this facility fall out. This is of concern both for human health reasons (dust and particulate that accumulates on outdoor furniture and pathways and/or that blows into homes and businesses) and for wildlife (the deposited toxic chemicals wash in stormwater into the Duwamish River and Puget Sound). We request that a map be

Clear Day

Page 2 of 2

produced and presented to the public.

3. Mitigation. Why is Nucor not being required to improve or increase their stack cleaning devices or otherwise eliminate an increase in contaminants in their air emissions at this time of a requested expansion of pollutant loading?

4. Complete toxics testing. Because the facility is proposing a significant expansion of operations, why are they not being required to conduct a complete sampling and analysis of their air emissions at this time – i.e., full toxic screening? This information should be presented to the public.

This facility and other nearby facilities iteratively increase their operations over time (Nucor last expanded operations in 2005) and yet there is no comprehensive report to the public as to the cumulative and ever-expanding increase in the toxics load in the airshed. It is time for the air and health agencies to become more accountable to the public.

Thank you for the opportunity to comment on the proposed project. Please contact me with questions at (206) 529-4572.

Sincerely,

Jennifer Ross
(206) 529-4572

Comment 2.1: Analysis of cumulative impacts

Agency Response: See Agency response to Comment 1.1

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

Comment 2.2: Air plume fall-out map

Agency Response: See Agency response to Comment 1.2

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

Comment 2.3: Emission controls and elimination of emission increases

Agency Response: See Agency response to Comment 1.3

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

Comment 2.4: Toxics testing and cumulative assessment of toxics in airshed

Agency Response: See Agency response to Comment 1.4

WRITTEN COMMENT 3 (HEATHER TRIM)

Agata McIntyre

From: htrim@pugetsound.org
Sent: Monday, January 14, 2008 3:09 PM
To: rhib461@ecy.wa.gov; Agata McIntyre; Steve Van Slyke
Cc: 'Bruce Wishart'; 'Kathy Fletcher'; 'Rein Attemann'; 'Cyrilla Cook'; 'Naki Stevens'; Hudgins.zack@leg.wa.gov
Subject: Nucor Steel Air Permit
Attachments: People For Puget Sound Nucor air Comment Letter Jan 14 2008.doc

Hi Richard and Agata,

Attached is our comment letter on Nucor Steel. Thank you for holding a public meeting last week.

Best,
Heather

Heather Trim
Urban Bays and Toxics Program Manager
People For Puget Sound
911 Western Ave, Suite 580
Seattle, WA 98104
General tel: 206.382.7007 X215
Direct tel: 206.382.7005, immediately hit 215
Fax: 206.382.7006
email: htrim@pugetsound.org
url: pugetsound.org



January 14, 2008

Richard B. Hibbard
Washington State Department of Ecology
Air Quality Program
P.O. Box 47600
Olympia, WA 98504-7600
Via Email: rhib461@ecy.wa.gov

Agata McIntyre
Puget Sound Clean Air Agency
1904 Third Avenue – Suite 105
Seattle, WA 98101
Via Email: AgataM@pscleanair.org

RE: Nucor Steel, Seattle Inc. Proposed Expansion and Increase in Air Pollution

To Mr. Hibbard and Ms. McIntyre,

We are writing to comment on the approval of the proposed expansion of Nucor Steel's production and resulting increase in air emissions.

People For Puget Sound is a nonprofit, citizens' organization whose mission is to protect and restore Puget Sound and the Northwest Straits, including a specific goal to protect and restore the 2,000 miles of Puget Sound shoreline by 2015.

Nucor Steel appears to be a proactive company that complies with their environmental obligations overall. They also provide a valuable service by recycling metal (including cars and scrap metal) which benefit the environment by reducing the need for additional mining. We feel, however, that the company should be required to reduce their air pollutant load that contributes to an otherwise overtaxed airshed.

As detailed in documents on the Puget Sound Clean Air Agency's web page, Nucor Steel proposes to upgrade one of the existing single hoist cranes to a double hoist crane which will enable them to increase production of steel billets in the meltshop from 795,000 to 1,100,000 tons per year. Although this operational expansion will not increase hourly emission rates, it will allow the facility to operate on a more continuous basis and will increase their overall emissions (emissions per year). Air emissions from the facility

MAIN OFFICE	NORTH SOUND	SOUTH SOUND
911 Western Avenue, Suite 580 Seattle, WA 98104 (206) 382-7007 fax (206) 382-7006 people@pugetsound.org	407 Main Street, Suite 201 Mount Vernon, WA 98273 (360) 336-1931 fax (360) 336-5422 northsound@pugetsound.org	1063 Capitol Way South, Suite 205 Olympia, WA 98501 (360) 754-9177 fax (360) 534-9371 southsound@pugetsound.org

come from three areas: the electric arc furnace, natural gas combustion from the ladle preheaters and flying cutting torches, and a reheat furnace. The current and projected emissions from Nucor are:

Constituent	Proposed	Current	
Particulate matter (PM10)	42.6	32.6	tons per year
Particulate matter (PM2.5)	11.8	9.7	tons per year
TSP	86.8	64.1	tons per year
SO ₂	55.3	39.6	tons per year
NO _x	210.4	171.4	tons per year
VOC	33.8	24.7	tons per year
CO	923.8	662.8	tons per year
Lead	0.15	0.11	tons per year
Cadmium	5.15	3.68	pounds per year
Chrome VI	0.23	0.17	pounds per year
Arsenic	0.49	0.35	pounds per year

In addition to the greenhouses gases listed at the top of the table, lead, cadmium, chrome VI and arsenic are highly toxic chemicals that impact both human and wildlife health. Toxic chemicals from this facility may adsorb onto existing particulates in the airshed.

Our comments follow:

- Cumulative Impact.** USEPA has initiated an effort to address cumulative risks in both human health and ecological conditions and it is appropriate that this be applied in the Duwamish basin. Puget Sound Clean Air Agency and The Department of Ecology should treat this facility combined with all other industrial facilities emitting pollutants in the Duwamish airshed as a whole. By only looking at each facility individually, the public is deprived of context and information about the total cumulative load of toxic pollutants and greenhouses gases in the entire airshed. Nucor alone may be a limited load but each facility's contribution adds up to a large and, we believe, unacceptable load. We request that the total load of toxic chemicals being discharged to the airshed be presented to the public before any additional permits or permit expansions are allowed. We are overdue for this information.
- Air plume fall-out map.** Once again, the public is not shown a map that outlines the area on the ground where pollutants from this facility fall out. This is of concern both for human health reasons (dust and particulate that accumulates on outdoor furniture and pathways and/or that blows into homes and businesses) and for wildlife (the deposited toxic chemicals wash in stormwater into the Duwamish River and Puget Sound). We request that a map be produced and presented to the public.
- Mitigation.** Why is Nucor not being required to improve or increase their stack cleaning devices or otherwise eliminate an increase in contaminants in their air emissions at this time of a requested expansion of pollutant loading?
- Complete toxics testing.** Because the facility is proposing a significant expansion of operations, why are they not being required to conduct a complete sampling and analysis of their air emissions at this time – i.e., full toxic screening? This information should be presented to the public.

This facility and other nearby facilities iteratively increase their operations over time (Nucor last expanded operations in 2005) and yet there is no comprehensive report to the public as to the cumulative and ever-expanding increase in the toxics load in the airshed. It is time for the air and health agencies to become more accountable to the public.

Thank you for the opportunity to comment on the proposed project. Please contact me with questions at (206) 382-7007 X215.

Sincerely,

Heather Trim
Urban Bays and Toxics Program Manager

Comment 3.1: Analysis of cumulative impacts

Agency Response: See Agency response to Comment 1.1

Conclusion: *PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

Comment 3.2: Air plume fall-out map

Agency Response: See Agency response to Comment 1.2

Conclusion: *PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

Comment 3.3: Emission controls and elimination of emission increases

Agency Response: See Agency response to Comment 1.3

Conclusion: *PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

Comment 3.4: Toxics testing and cumulative assessment of toxics in airshed

Agency Response: See Agency response to Comment 1.4

WRITTEN COMMENT 4 (BRIAN DOUGHERTY)

Agata McIntyre

From: industrialbiker@comcast.net
Sent: Monday, January 14, 2008 3:05 PM
To: Agata McIntyre
Subject: Nucor permit comments

Dear Ms. McIntyre,

I am writing to comment on the approval of the proposed expansion of Nucor Steel's production and resulting increase in air emissions.

It is not this ONE facility that is the problem - it is the accumulation of the pollution from the large number of facilities and the mobile sources. It all adds up!

Nucor proposes to upgrade one of the existing single hoist cranes to a double hoist crane which will enable them to increase production of steel billets in the meltshop from 795,000 to 1,100,000 tons per year. Although this operational expansion will not increase hourly emission rates, it will allow the facility to operate on a more continuous basis and will increase their overall emissions (emissions per year).

Puget Sound Clean Air Agency and The Department of Ecology should treat this facility combined with all other industrial facilities emitting pollutants in the Duwamish airshed as a whole.

I would like to see a map that outlines the area on the ground where pollutants from this facility fall out. This is of concern both for human health reasons (dust and particulate that accumulates on outdoor furniture and pathways and/or that blows into homes and businesses) and for wildlife (the deposited toxic chemicals wash in stormwater into the Duwamish River and Puget Sound).

Finally, Nucor should be required to improve their stack cleaning devices prior to approval of this permit.

Brian Dougherty
Seattle, WA

Comment 4.1: Cumulative impacts

Agency Response: See Agency response to Comment 1.1

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

Comment 4.2: Air plume fall-out map

Agency Response: See Agency response to Comment 1.2

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

Comment 4.3: Emission controls and elimination of emission increases

Agency Response: See Agency response to Comment 1.3

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

WRITTEN COMMENT 5 (STUDIOGLOW-KOTO)

Page 1 of 1

Agata McIntyre

From: Studioglow-Koko [studioglow@earthlink.net]
Sent: Monday, January 14, 2008 2:43 PM
To: Agata McIntyre; htrim@pugetsound.org
Subject: nucor air permit-duh no

Should there be more toxic waste emitted into our air? What a stupid question. Hum do we want more toxics in the air? Duh NO . What the question really is is any body paying attention and will they do anything about it.

Besides, looking for better drugs to ease the pain.

Please let me know if you didn't get a huge response from southpark.

Thank You
Koko
Studio Glow
1025 South Sullivan Street
Seattle, WA 98108
Shop 206 726 1147
Cell 206 551 3022
www. studioglow.net
koko@studioglow.net

Agency Response: See Agency response to Comment 1.1

Both PS Clean Air and Ecology conducted reviews of the emission increases from this project. These increases were found to be within acceptable levels with regard to ambient air impact criteria.

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

WRITTEN COMMENT 6 (KATHY NYLAND)

Agata McIntyre

From: Kathy Nyland [alamodem@earthlink.net]
Sent: Monday, January 14, 2008 1:59 PM
To: Agata McIntyre
Subject: NUCOR permit

Agata McIntyre-

This is in response to NUCOR's request to increase operations, thus resulting in an air pollution increase, including some highly toxic chemicals.

While I understand NUCOR's desire to increase production of steel billets from 795,000 to over one million tons per year, the cost to those who reside near NUCOR will truly pay the price.

I hope their request is denied.

Until the city and state work to combat the cumulative effect of all the toxic and pollutants, all requests for an increase in production should be put on hold. I don't not say these words lightly.

I know NUCOR is a business and is working hard to make a profit. They are not solely responsible for the air quality or lack of, however, they are one of many businesses compromising the quality of our air.

The big picture, the cumulative effect, needs to be addressed. I ask that NUCOR's request for an increase in production be denied until such a conversation occurs.

Thank you for your time.

-Kathy Nyland, Georgetown

Agency Response:

As discussed in PS Clean Air's response to comment 1.1, the Agency's permit review process is limited to the increases from this proposed project. The desire to evaluate cumulative impacts of multiple sources of pollutants in the area is not achievable through the review of this one project alone. PS Clean Air has no legal basis to deny the Nucor crane project until a cumulative impact analysis is done.

Cumulative impacts of air emissions are reviewed by the Washington Department of Health, whose mission is to "protect and improve the health of people in Washington State". As part of this mission, the Department has been working to quantify and analyze cumulative air emission in various communities. Such analyses include impacts from industrial sources like Nucor. PS Clean Air works cooperatively with the Washington Department of Health on such projects when concerns are identified about communities within the Agency's jurisdiction. Cumulative impact projects are generally larger in scope than any single project at an industrial facility and reviews of cumulative impacts are done independently from WAC 173-400-110 reviews.

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

WRITTEN COMMENT 7 (HOLLY KREJCI)

Agata McIntyre

From: holly krejci [holly.krejci@gmail.com]
Sent: Monday, January 14, 2008 1:35 PM
To: rhib461@ecy.wa.gov; Agata McIntyre
Cc: delfierro.s@portseattle.org; htrim@pugetsound.org; Kathy Home
Subject: Nucor Steel

Dear Mr. Hibbard & Ms. McIntyre,

I am writing to send my concern for Nucor Steel's plan to increase production, and thus increase pollutants in the area of Delridge West Seattle.

Last week, I had the pleasure of attending a meeting where Port of Seattle Commissioner, Gayle Tarleton, took time to meet with community members from Delridge, Georgetown, White Center, Sea-Tac and South Park. The topic of the discussion was the Port's new Clean-Air Strategy.

I side with the People for Puget Sound with regard to their concerns about adding more pollutants to an already highly contaminated area.

It would be prudent, I think, that any mitigation for increased production be in agreement (or better) with the Port's commitment to improving the quality of air for port communities.

Thanks much for your time and thoughtful consideration.

Cheers,
Holly
resident - Georgetown

Agency Response:

As discussed in the response to comment 1.3, PS Clean Air's authority to require additional air emission controls as part of the NOC review process is limited to units that are physically modified. For this project, the only unit that is physically modified is the crane. In its permit application, Nucor evaluated various controls of air emissions from the crane and demonstrated that BACT for this project is the use of the existing watering system and scrap yard covering. While PS Clean Air cannot require that Nucor mitigate its air emissions impacts, Nucor has taken numerous steps to voluntarily limit its emissions. These include the actions discussed in detail in response to comment 1.3. The voluntary actions taken by Nucor can be looked at in the same light as the Port of Seattle's voluntary actions to curb air emissions. While PS Clean Air cannot go above its legal mandate to require such reductions, we have found that a great deal can be gained by encouraging and supporting voluntary measures. PS Clean Air has a team of staff that routinely works on such voluntary measures, and will continue to support Nucor, the Port of Seattle, and other businesses that choose to take voluntary steps.

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

WRITTEN COMMENT 8 (TRACEY FRENCH)

Agata McIntyre

From: Tracey French [traceyf@seattlecounseling.org]
Sent: Monday, January 14, 2008 11:16 AM
To: Agata McIntyre
Subject: NUCOR #9669

Please, no more pollution in South Park.
Just because poor people live there, doesn't mean
its ok to pollute there.
Its bad enough already.
A Superfund site isn't even clean yet.

NO MORE POLLUTION IN SOUTH PARK.

Tracey French

NEON Project Coordinator
1216 Pine St., Suite 300
Seattle, WA 98101
206.323.1768 x209
206.323.2184 fax

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Agency Response:

Both PS Clean Air and Ecology conducted reviews of the emission increases from this project. These increases were found to be within acceptable levels with regard to ambient air impact criteria.

***Conclusion:** PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

WRITTEN COMMENT 9 (GARY LICHTENSTEIN)

Comment on Nucor Permit #9669

Page 1 of 1

Agata McIntyre

From: Gary Lichtenstein [glichtenstein@comcast.net]
Sent: Monday, January 14, 2008 10:16 AM
To: Agata McIntyre
Subject: Comment on Nucor Permit #9669

Hello Agata,

My comments are on Nucor Steel, Inc. Permit #9669.

My concern is the increase of PM, CO, NOx, etc.. The regulations are set now to do the best at protecting human health while allowing for appropriate economic activity. The Duwamish River has several other major emitters. I don't see in this permit, a lowering of other emitters in the area. What is the basis of this permit, other than Nucor wanting to expand their business?

I would like to see the Agency and Ecology create a solid cap of total emissions for the valley - and then give individual companies more incentive to lower their own emissions, and perhaps sell the rights to pollute to others along the Duwamish. Yes, Cap and Trade for particulate matter, CO, NOx and other pollutants. There is no reason you can't do this on a local level. It would set a great example for other communities around the Puget Sound and beyond.

Ask yourself, what is the total emissions from the Duwamish River business community that would continue be protective of human health and the environment - then stop nickel and diming the citizenry every time someone wants to expand their business. The Agency should be encouraging more environmentally friendly businesses that have low emissions to take up and maintain a residence along the Duwamish.

I like Nucor. It's mission to recycle metal is a good one, in fact a great one; however, I do not want to further the destruction of the environment and increase incidence of asthma, and other related human health issues so Nucor can make more money. I don't see a comparative value. Why should I, my family and friend and the environment be at an increased risk for no benefits to my community, other than to the Nucor Steel owners and employees. A child and a family dealing with asthma isn't worth it.

I am a member of Sustainable West Seattle (SWS), a community organization. I am on it's Steering Committee. I am also the SWS representative to SCALLOPS (Sustainable Communities ALL Over Puget Sound). I feel that my opinions represent many others in my community.

Gary Lichtenstein
glichtenstein@comcast.net
206.923.2656

Comment 9.1: Cumulative impact

Agency Response:

As discussed in PS Clean Air's response to comment 1.1, the Agency's permit review process is limited to the increases from this proposed project. The desire to evaluate cumulative impacts of multiple sources of pollutants in the area is not achievable through the review of this one project alone.

Cumulative impacts of air emissions are reviewed by the Washington Department of Health, whose mission is to "protect and improve the health of people in Washington State". As part of this mission, the Department has been working to quantify and analyze cumulative air emission in various communities. Such analyses include impacts from

industrial sources like Nucor. PS Clean Air works cooperatively with the Washington Department of Health on such projects when concerns are identified about communities within the Agency's jurisdiction. Cumulative impact projects are generally larger in scope than any single project at an industrial facility and reviews of cumulative impacts are done independently from WAC 173-400-110 reviews.

***Conclusion:** PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

Comment 9.2: Area-wide cap on emissions (cap and trade)

As discussed earlier, PS Clean Air does not have the authority to require an area wide cap on emissions as part of the permit review for the Nucor crane project.

Area-wide caps on emissions such as the one suggested in this comment have been instituted in some airsheds with impaired air quality. However, there are many considerations including equity with regard to how to divide the cap that make setting a cap challenging. In general, such caps are only set for pollutants which do not meet the national ambient air quality standards (NAAQS). The Seattle area is currently in compliance with all NAAQS. Therefore, an area-wide cap is not currently being proposed. However, if Agency and state monitors determine that air quality in the area does not meet the NAAQS, an area-wide cap may be considered as one of the measures to bring the area back into compliance.

***Conclusion:** PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

WRITTEN COMMENT 10 (DEBORAH SEMER)

Page 1 of 4

Agata McIntyre

From: Deborah Semer [deborah_semer@mac.com]
Sent: Monday, January 14, 2008 1:14 AM
To: Agata McIntyre
Cc: MICHAEL
Subject: comment about expansion

Hello, I have been a resident in the area since 1994, just up the street from Nucor and oppose any expansion of its operations due to the negative impact on the residents, natural resources and wildlife in the area. The amount of black dust and debris that accumulates in my home is abnormally high compared to other homes and is of great concern to me about how it affects my health. I am all for industry however, I have always thought that Nucor should have relocated a long time ago. It's location is not only an huge eyesore, but the waste produced and dumped next to Elliot Bay and the Duwamish river are simply detrimental. Surely there is a better place for this company.

-Deborah Semer

Nucor Air Permit comments needed

Posted by: "htrim@pugetsound.org" htrim@pugetsound.org htrim
Sun Jan 13, 2008 12:31 pm (PST)

Hi all,

I am sorry to get this out to you so late (I was out of town till mid-week last week). Comments are due tomorrow (Monday the 14th) to the agencies about the draft permit modification for Nucor Steel. They plan to increase operations - resulting in an air pollution increase, including some highly toxic chemicals. At the public hearing last week, I was the only person to raise concerns (I am sorry that I didn't get the word out about that hearing) - partly because I don't think that folks know much about the situation.

If you are able to send a short email tomorrow to the agencies (see draft comment letter pasted below), that would be great. It is not this ONE facility that is the problem - it is the accumulation of the pollution from the large number of facilities and the mobile sources. It all adds up!

For more specific info about the Nucor facility permit see:

<http://www.pscleanair.org/announce/permits/openpermits.aspx>

Best, Heather (see below)

January 14, 2008

Richard B. Hibbard

Washington State Department of Ecology

Air Quality Program

P.O. Box 47600

Olympia, WA 98504-7600

Via Email: rhib461@ecy.wa.gov

Agata McIntyre

1/17/2008

Puget Sound Clean Air Agency

1904 Third Avenue - Suite 105

Seattle, WA 98101

Via Email: AgataM@pscleanair.org

RE: Nucor Steel, Seattle Inc. Proposed Expansion and Increase in Air Pollution

To Mr. Hibbard and Ms. McIntyre,

We are writing to comment on the approval of the proposed expansion of Nucor Steel's production and resulting increase in air emissions.

People For Puget Sound is a nonprofit, citizens' organization whose mission is to protect and restore Puget Sound and the Northwest Straits, including a specific goal to protect and restore the 2,000 miles of Puget Sound shoreline by 2015.

Nucor Steel appears to be a proactive company that complies with their environmental obligations overall. They also provide a valuable service by recycling metal (including cars and scrap metal) which benefit the environment by reducing the need for additional mining. We feel, however, that the company should be required to reduce their air pollutant load that contributes to an otherwise overtaxed airshed.

As detailed in documents on the Puget Sound Clean Air Agency's web page, Nucor Steel proposes to upgrade one of the existing single hoist cranes to a double hoist crane which will enable them to increase production of steel billets in the meltshop from 795,000 to 1,100,000 tons per year. Although this operational expansion will not increase hourly emission rates, it will allow the facility to operate on a more continuous basis and will increase their overall emissions (emissions per year). Air emissions from the facility come from three areas: the electric arc furnace, natural gas combustion from the ladle preheaters and flying cutting torches, and a reheat furnace. The current and projected emissions from Nucor are:

Constituent Proposed
Current

Particulate matter (PM10) 42.6 32.6 tons per year

Particulate matter (PM2.5) 11.8 9.7 tons per year

TSP 86.8
64.1 tons per year

SO₂ 55.3
39.6 tons per year

NO_x 210.4
171.4 tons per year

VOC 33.8 24.7
tons per year

CO 923.8 662.8
tons per year

Lead 0.15
0.11 tons per year

1/17/2008

Cadmium 5.15
3.68 pounds per year

Chrome VI 0.23
0.17 pounds per year

Arsenic 0.49 0.35
pounds per year

In addition to the greenhouses gases listed at the top of the table, lead, cadmium, chrome VI and arsenic are highly toxic chemicals that impact both human and wildlife health. Toxic chemicals from this facility may adsorb onto existing particulates in the airshed.

Our comments follow:

1. Cumulative Impact. Puget Sound Clean Air Agency and The Department of Ecology should treat this facility combined with all other industrial facilities emitting pollutants in the Duwamish airshed as a whole. By only looking at each facility individually, the public is deprived of context and information about the total load of toxic pollutants and greenhouses gases in the entire airshed. Nucor alone may be a limited load but each facility's contribution adds up to a large and, we believe, unacceptable load. We request that the total load of toxic chemicals being discharged to the airshed be presented to the public before any additional permits or permit expansions are allowed. We are overdue for this information.
2. Air plume fall-out map. Once again, the public is not shown a map that outlines the area on the ground where pollutants from this facility fall out. This is of concern both for human health reasons (dust and particulate that accumulates on outdoor furniture and pathways and/or that blows into homes and businesses) and for wildlife (the deposited toxic chemicals wash in stormwater into the Duwamish River and Puget Sound). We request that a map be produced and presented to the public.
3. Mitigation. Why is Nucor not being required to improve or increase their stack cleaning devices or otherwise eliminate an increase in contaminants in their air emissions at this time of a requested expansion of pollutant loading?
4. Complete toxics testing. Because the facility is proposing a significant expansion of operations, why are they not being required to conduct a complete sampling and analysis of their air emissions at this time - i.e., full toxic screening? This information should be presented to the public.

This facility and other nearby facilities iteratively increase their operations over time (Nucor last expanded operations in 2005) and yet there is no comprehensive report to the public as to the cumulative and ever-expanding increase in the toxics load in the airshed. It is time for the air and health agencies to become more accountable to the public.

Thank you for the opportunity to comment on the proposed project. Please contact me with questions at (206) 382-7007 X215.

Sincerely,

Heather Trim

Urban Bays and Toxics Program Manager

Heather Trim

Urban Bays and Toxics Program Manager

People For Puget Sound

1/17/2008

911 Western Ave, Suite 580
Seattle, WA 98104
General tel: 206.382.7007 X215
Direct tel: 206.382.7005, immediately hit 215
Fax: 206.382.7006
email: htrim@pugetsound.org
url: pugetsound.org

Agency Response:

As discussed in PS Clean Air's response to comment 1.1, the Agency's permit review process is limited to the increases from this proposed project. The increases from the crane upgrade project were found to be within acceptable levels with regard to ambient air impact criteria. PS Clean Air has no authority under NOC review program to reject the project if the project increases are within the acceptable levels.

We are aware that the area around the Nucor facility is a mixed use area which includes housing, businesses, and industry. However, PS Clean Air has no authority to require Nucor to cease operations.

***Conclusion:** PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

WRITTEN COMMENT 11 (KAREN SISSON)

Agata McIntyre

From: karenS [KarenS@seniorservices.org]
Sent: Wednesday, January 09, 2008 9:50 AM
To: Agata McIntyre
Subject: in support

Nucor Steel has been, and remains an active part of our community. Whether it is Nucor supporting non-profits in capital campaigns in the Seattle area, or supporting schools and assisting at continuing services being provided for the less privileged we support our neighbor.

The grounds of Nucor is pleasing, with the trees being planted, it is clean and they offer tours of the plant to educate the public on their process, and explain the recycle of what could be considered garbage from by-product as the rebar is made as well as the reuse of water.

The economy is growing and more steel is needed, if we do not support the growth here in West Seattle, the growth will happen, just elsewhere.

I go on record, not only as a Director of one of those non profit agencies that has been assisted by Nucor, but as a West Seattle citizen I strongly behind the additional crane at the Nucor plant to expand the manufacturing ability of the facility.

Karen Sisson

"If you hear a different drummer -- dreamer, take a chance . . . The road you choose to travel means the difference in the dance."
-- D. Morgan

** This message is intended for the sole use of the individual and entity to whom it is addressed, and may contain

Agency Response:

This comment was in support of the Nucor crane project. No changes were requested to PS Clean Air permits as a result of this comment.

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

WRITTEN COMMENT 12 (NANCY FOLSOM)

From: Nancy Folsom [mailto:nancy.folsom@gmail.com]
Sent: Wednesday, December 12, 2007 6:24 PM
To: Agata McIntyre; rhb461@ecy.wa.gov
Cc: Ron Angeles; high-point-seattle@googlegroups.com; North Delridge Neighborhood Council
Subject: Re: Nucor Steel permit hearing January 9th

Ms. McIntyre, Mr. Hibbard-

Thank you both for your quick and informative replies.

I appreciate your effort to secure the Delridge Community Center, Ms. McIntyre. It's a shame the center wasn't able to accommodate this hearing. Thanks for trying, though!

Regards,
Nancy Folsom

On Dec 12, 2007 3:22 PM, Agata McIntyre <AgataM@pscleanair.org> wrote:
Dear Ms. Folsom,

I wanted to respond to your question about the hearing venue in person since I was the one who conducted the search for the venue. The Delridge Community Center was actually the first place I contacted. When I spoke with them, the front desk person informed me that based on her knowledge of the winter class schedule, the room would not be available Monday through Thursday evening. We thought about booking the room for Friday evening, but our experience from other public hearings has shown that this is a difficult day for the public to attend. For these reasons, we continued to search for another venue nearby. The best fit we found was the Alki Community Center. When researching the Alki Community Center venue, I noted that the Seattle Parks and Recreation website (<http://www.seattle.gov/parks/Centers/Alki/directions.htm#bus>) discusses bus access to the community center. I hope that this website may be of assistance to you.

I am sorry for any inconvenience this choice in venue may cause, and hope that you and others who may be affected by the project are still able to attend the January 9th meeting. If you are unable to attend, please submit written comments to either Rich Hibbard or me on or before January 14th. All comments will be considered.

Sincerely,

Agata McIntyre, PE
Air Pollution Engineer

Puget Sound Clean Air Agency
1904 3rd Ave Ste 105
Seattle WA 98101-3317
Phone: (206) 689-4061
Fax: (206) 343-7522

From: Hibbard, Richard (ECY) [mailto:rhib461@ECY.WA.GOV]
Sent: Wednesday, December 12, 2007 12:53 PM
To: Nancy Folsom; Agata McIntyre

Cc: matthew.g.miller@juno.com; North Delridge Neighborhood Council; high-point-seattle@googlegroups.com; Ron Angeles
Subject: RE: Nucor Steel permit hearing January 9th

Ms. Folsom:

Thank you for your recommendation to move the public hearing. First off I am not the author of Permit 10281. That permit is the Notice of Construction permit issued by the Puget Sound Clean Air Agency. Please contact Ms. Agata McIntyre at agatam@pscleanair.org for issues related to that permit. I am involved in issuing its companion permit called a Prevention of Significant Deterioration (PSD) permit for carbon monoxide emissions. Specifically PSD-07-02. The PSD permit is located on our website at http://www.ecy.wa.gov/programs/air/psd/psd_publiccomments.html if you have not already seen it. The PSD permit I am issuing will also be discussed and open for comments at the public hearing.

Ms. McIntyre was kind enough to arrange the hearing because she is located in Seattle and I am in Olympia. I assume that either the community Center was not available or we were not aware of its presence when we looked for a spot to hold the hearing. We will keep Delridge Community Center in mind for the next hearing but if it is available and we switched now it would require rerunning the public notice. As state and local government employees we certainly don't want to send the public to an address that we are not going to be at. Also as you can imagine Nucor Steel is anxious to complete the permitting process and begin construction. The public as well as Nucor steel are our clients and we do not want to delay their permit should it be able to be issued after the hearing.

I apologize for inconveniencing you and the rest of the public for making you travel further for this hearing. In the future should there be another public hearing for Nucor Steel we will look into the use of the Delridge Community Center.

I look forward to meeting you at the hearing

Richard Hibbard
(360) 407-6896

From: Nancy Folsom [mailto:nancy.folsom@gmail.com]
Sent: Wednesday, December 12, 2007 12:27 PM
To: Hibbard, Richard (ECY)
Cc: matthew.g.miller@juno.com; North Delridge Neighborhood Council; high-point-seattle@googlegroups.com; Ron Angeles
Subject: Nucor Steel permit hearing January 9th

Dear Mr. Hibbard-

I understand you are the contact person for the Nucor Steel permit application Permit #10281.

The public hearing is scheduled for January 9th, at the Alki Community Center.

I respectfully urge you to move the meeting to the Delridge Community Center at 4501 Delridge Way SW.

Alki is 2-1/2 miles from Nucor, whereas Delridge is 5 blocks away.

I'm sure you can see that a change in venue would better allow the neighbors most affected to attend the hearing, especially since our community is mixed income and includes many people who do not have cars, are older, or have very young children.

Thank you for your support.

--

Nancy Folsom
206.932.2512
Genesee & Delridge resident
Secretary, North Delridge Neighborhood Council

Agency Response:

As discussed above in the email response to Ms. Folsom's question, other venues including the Delridge Community Center were considered. However, the venue that had the best room availability was the Alki Community Center.

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

WRITTEN COMMENT 13 (MICHAEL DADY)

Agata McIntyre

From: Agata McIntyre
Sent: Wednesday, December 12, 2007 2:55 PM
To: 'Hibbard, Richard (ECY)'; 'michael dady'
Cc: 'Jonah Spangenthal-Lee'; 'Kery Murakami'; 'Westseattleblogger Westseattleblogger'; Steve Van Slyke
Subject: RE: Change Of Venue Request for Nucor Public Meeting

Good afternoon everyone,

Just a note to let you know that I did contact the Delridge Community Center, but the front desk person informed me that the room we would need is often used for classes on weekday evenings. We discussed the availability of the room, and she stated that based on her knowledge of the winter class schedule, the only day the room would be available is Friday. We thought about booking the room for Friday but our experience from other public hearings has shown that this is a difficult day for people to attend in the evening. For these reasons, we continued to search for another venue nearby which would have a large room and parking. The best fit we found was the Alki Community Center, approximately 2.5 miles away from Nucor Steel.

I am sorry for any inconvenience this may cause, and hope that you'll still be able to attend the January 9th meeting. If you are unable to attend, please submit written comments to either Rich Hibbard or me on or before January 14th.

Sincerely,

Agata McIntyre, PE
Air Pollution Engineer
Puget Sound Clean Air Agency
1904 3rd Ave Ste 105
Seattle WA 98101-3317
Phone: (206) 689-4061
Fax: (206) 343-7522

From: Hibbard, Richard (ECY) [mailto:rhib461@ECY.WA.GOV]
Sent: Wednesday, December 12, 2007 1:46 PM
To: michael dady; Agata McIntyre
Cc: Jonah Spangenthal-Lee; Kery Murakami; Westseattleblogger Westseattleblogger
Subject: RE: Change Of Venue Request for Nucor Public Meeting

Mr. Dady:

Thank you for your recommendation to move the public hearing. I recently received this same request from Ms. Folsom. Ms. McIntyre from the Puget Sound Clean Air Agency was kind enough to arrange the hearing because she is located in Seattle and I am in Olympia. I assume that either the Community Center was not available or we were not aware of its presence when we looked for a spot to hold the hearing. We will keep Delridge Community Center in mind for the next hearing but if it is available and we switched now it would require rerunning the public notice. As state and local government employees we certainly don't want to send the public to an address that we are not going to be at. Also as you can imagine Nucor Steel is anxious to complete the permitting process and begin construction. The public as well as Nucor steel are our clients and we do not want to delay their permit should it be able to be issued after the hearing.

I apologize for inconveniencing you and the rest of the public for making you travel further for this hearing. In the future should there be another public hearing for Nucor Steel we will look into the use of the Delridge Community Center.

I look forward to meeting you at the hearing

Richard Hibbard
(360) 407-8896

From: michael dady [mailto:chigiwigi@hotmail.com]
Sent: Wednesday, December 12, 2007 1:42 PM
To: Hibbard, Richard (ECY)
Cc: Jonah Spangenthal-Lee; Kery Murakami; Westseattleblogger Westseattleblogger
Subject: Change Of Venue Request for Nucor Public Meeting

Greetings Mr. Hibbard,

I am urging you to please move the venue for the upcoming January 9th Public Hearing regarding the Nucor Steel permit application to the Delridge Community Center versus the Alki Community Center.

Logistically this makes the most sense as the Delridge Community Center is within eyeshot of the plant, being just a few blocks away. The Delridge Community Center also serves a large number of nearby residents.

In terms of fairness, openness and environmental justice this is the only right thing to do.

Sincerely,
Mike Dady
Co-Chair - North Delridge Neighborhood Council
4805 23rd Ave SW
Seattle WA
98106
206-767-0337

Agency Response:

As discussed above in the email response to Mr. Dady's question, other venues including the Delridge Community Center were considered. However, the venue that had the best room availability was the Alki Community Center.

***Conclusion:** PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

WRITTEN COMMENT 14 (TONIA WELLS)

Page 1 of 1

Agata McIntyre

From: The Wells Family [thewellsfam@comcast.net]
Sent: Friday, November 30, 2007 7:24 AM
To: Agata McIntyre
Subject: Nucor Steele NOT getting another crane

I'd like to comment on the new crane proposal for Nucor Steel. I live just up the hill from the plant and believe it is irresponsible to allow more pollution in the area w/o requiring some sort of clean-up trade-off. Increased emissions from increased productivity will be dangerous to the nearby children. There is an elementary school right near my house – also just up the hill from Nucor. There are many, many families near this plant. They need to be reducing emissions, not creating more.

Thank you for taking this into consideration,

Tonia Wells
West Seattle resident

Agency Response:

Both PS Clean Air and Ecology conducted reviews of the emission increases from this project. These increases were found to be within acceptable levels with regard to ambient air impact criteria.

As discussed in the response to comment 1.3, PS Clean Air's authority to require additional air emission controls is limited to units that are physically modified. For this project, the only unit that is physically modified is the crane. In its permit application, Nucor evaluated various controls of air emissions from the crane and demonstrated that BACT for this project is the use of the existing watering system and scrap yard covering.

While PS Clean Air has no basis to require that Nucor lower its air emissions impacts in relation to the proposed project, Nucor has taken numerous steps to voluntarily limit its emissions. These include the actions discussed in detail in response to comment 1.3.

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

WRITTEN COMMENT 15 (KEITH BACON)

Agata McIntyre

From: Keith Bacon [kbacon@earthlink.net]
Sent: Wednesday, November 21, 2007 2:43 PM
To: Agata McIntyre
Subject: comment on permit #10281

I'm writing to comment on Nucor Steel Seattle's Permit Application #1028. After reviewing the information posted on the Puget Sound Clean Air Agency website, I feel it would be very irresponsible and harmful to approve this permit.

While I understand Nucor's proposal is designed to help the company increase production and profit, I'm very concerned with the negative impact from increased pollutants that will come with this change, as outlined in the proposal.

Nucor certainly has a right to make money, but at what cost to the health and well-being of their neighbors and community? Why is there no stipulation with this permit that increased production should come with increased vigilance and enforcement of environmentally responsible business practices?

I think the permit should only be granted if Nucor is also required to contain or, better yet, decrease the amount of pollutants they already generate into our environment. This stipulation should be something Nucor is monitored and held accountable for, and it must be real, immediate and locally enforced, not subject to "offsetting" by making monetary contributions or taking action elsewhere. With the Nucor plant located so close to residential communities and key waterways (the latter of which have been the focus of much local volunteer and government-supported clean-up efforts), it makes no sense to grant this permit and allow Nucor to release even higher levels of toxic substances and harmful pollutants.

Thank you for taking my comments into consideration.

Keith Bacon
4443B 44th Ave SW
Seattle, WA
98116

Comment 15.1: Negative Impact of Emission Increases

Agency Response:

The emission increases from this project were reviewed during the permit review for the project and were found to be within acceptable levels with regard to ambient air impact criteria. As discussed in the response to comment 1.1, PS Clean Air's permit review of a proposed project is guided by the regulatory framework set up for such reviews in the Washington Administrative Code (WAC). The Nucor crane project is a modification to an existing facility. As such, the project is subject to review in accordance with WAC Section 173-400-110(3), which limits review "to the emission unit or units proposed to be added to an existing source or modified and the air contaminants whose emissions would increase as a result of the modification". PS Clean Air reviewed the emission increases from this project, and found that they are within acceptable levels with regard to ambient air impact criteria. Under the authority of WAC Section 173-400-110(3), PS Clean Air cannot require additional mitigation above what is supported by the review conducted in accordance with the WAC.

***Conclusion:** PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

Comment 15.2: Accountability

Agency Response:

PS Clean Air's existing Air Operating Permit for the facility and the new permits for the crane project include conditions that are measurable and enforceable to limit emissions and ensure that the facility is operating in the best possible manner. Nucor is held accountable for these conditions through stack tests, Agency inspections, as well as requirements for self inspections and certifications of continuous compliance by company officers. Examples of these permit conditions are:

- Particulate and opacity limits on the baghouses (including annual source testing to make sure the limits are met)
- Carbon monoxide and oxides of nitrogen limits on the furnace (including annual source testing to make sure the limits are met)
- Weekly inspections of the scrap yard, building openings, and baghouse dust unloading areas for visible emissions and corrective action if visible emissions are seen

One additional aspect worth noting on this subject is that Nucor is an ISO 14001 certified facility. The ISO environmental management standards exist to help organizations minimize how their operations negatively affect the environment. While ISO certification is not mandated by PS Clean Air, the fact that a facility chooses to obtain the certification imposes additional requirements upon the facility, including audits of a facility's systems by outside third-party reviewers who evaluate and "grade" the systems. Briefly, ISO 14001 requires a facility to have an Environmental Management System to:

- identify and control the environmental impact of its activities, products or services
- improve its environmental performance continually, and
- implement a systematic approach to setting environmental objectives and targets, to achieving these and to demonstrating that they have been achieved.

***Conclusion:** PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

WRITTEN COMMENT 16 (ARLENE ROTH)

Page 1 of 1

Agata McIntyre

From: Arlene Roth [aroth@expedia.com]
Sent: Tuesday, November 20, 2007 1:56 PM
To: Agata McIntyre
Subject: Nucor Steel comments

As a long-time resident of West Seattle who values good health for myself, my family, and my community, I am horrified and dismayed at the proposal to upgrade the Nucor Steel hoist crane. This will result in significant increases in air pollution. I am shocked that the Department of Ecology, presumably created to safeguard our environment, is considering approving this dangerous action. With asthma, lung diseases, and cancer on the rise, it is utterly irresponsible for Ecology to approve this.

For the sake of protecting public health, I strongly recommend that a public hearing be held. We need to be up front about this health-threatening matter.

Arlene Rachel Roth
aroth@expedia.com

3725 SW Austin St.

Seattle, WA 98126

206-933-0977

Agency Response:

Both PS Clean Air and Ecology conducted reviews of the emission increases from this project. These increases were found to be within acceptable levels with regard to ambient air impact criteria.

***Conclusion:** PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

WRITTEN COMMENT 17 (ELLEEN MCHUGH)

Page 1 of 1

Agata McIntyre

From: Eileen McHugh [EileenM@Mithun.com]
Sent: Tuesday, November 20, 2007 12:57 PM
To: Agata McIntyre
Subject: Nucor steel draft air operating permit

Referring to Nucor Steel Seattle Inc
Permit #10281

Posted online: 11-9-2007 | Opens: 11-13-2007 | Closes: 12-12-2007

I am concerned as was un aware that this was going to occur. I feel that since the emissions increase projected exceeds safe levels and involves increases in VOCs and HAPs that a more thorough public hearing should be held on this issue.

Eileen McHugh 4837 51st Ave SW, Seattle WA 98116

Eileen T. McHugh
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www.mithun.com

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Agency Response: A hearing was held as requested by the commenter.

Conclusion: *PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.*

WRITTEN COMMENT 18 (JOHN ROSSELLI)

Agata McIntyre

From: Web Customer - John Rosselli [jrossellisr@yahoo.com]
Sent: Tuesday, October 23, 2007 9:09 PM
To: Steve Van Slyke
Subject: Web Info Request - Permitting

A request for information has been submitted through the agency's Web site.

Name: John Rosselli
Address: 615 Givens Ave., P.O.Box 1214
City/State/ZIP: Darrington, WA 98241
Phone: (360)-436-1564
E-mail: jrossellisr@yahoo.com

Nature of Request: Regarding Nucor permit. Wasn't sure who to send comment to. They are exceeding CO emissions they should not be given the permit without some modification. Understand increasing production or meltdown. How is this improving quality of life in Puget Sound. Increase Nucor bottom line at the expense of the community. I would be against approving this without some modification to reduce emissions. Do we wait until the Puget Sound become another Gary, In or the brown cloud that lingers over beautiful San Diego, CA. The permit should not be approved as it now stands

Agency Response:

Both PS Clean Air and Ecology conducted reviews of the emission increases from this project. These increases were found to be within acceptable levels with regard to ambient air impact criteria.

The CO emission increase projected for this project is above 100 tons per year, and is therefore by definition considered to be "significant". A "significant" increase in CO emissions is required to be reviewed by Ecology and must receive a Prevention of Significant Deterioration (PSD) permit before the project can be implemented. For more details about Ecology's review, please contact Rich Hibbard at 360-407-6896.

The comment above also cited a desire for modifications at the facility to reduce emissions. Please see response to comment 1.3 for a discussion of this topic.

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

WRITTEN COMMENT 19 (HEATHER TRIM)

Page 1 of 3

Agata McIntyre

From: htrim@pugetsound.org
Sent: Wednesday, January 09, 2008 11:16 AM
To: Agata McIntyre
Subject: RE: Nucor Steel

Thank you Agata,

I will see you tonight,
Heather

Heather Trim
Urban Bays and Toxics Program Manager
People For Puget Sound
911 Western Ave, Suite 580
Seattle, WA 98104
General tel: 206.382.7007 X215
Direct tel: 206.382.7005, immediately hit 215
Fax: 206.382.7006
email: htrim@pugetsound.org
url: pugetsound.org

From: Agata McIntyre [mailto:AgataM@pscleanair.org]
Sent: Thursday, January 03, 2008 10:08 AM
To: htrim@pugetsound.org
Cc: Steve Van Slyke; Hibbard, Richard (ECY)
Subject: RE: Nucor Steel

Good morning Heather,

Sorry to take so long to respond to you. I hope you had a happy holiday!

For the Nucor hearing, I'll plan to bring information from the materials we've posted for public comment on the topics you listed and pictures from the facility that provide a visual of where the project will take place. I'll post the information using PowerPoint, and will discuss as requested during the 6:30 to 7:30 time slot. Steve Van Slyke, representatives from Nucor Steel, Rich Hibbard from Ecology, and I will all be available for discussion.

I'm not planning on making a drawn out presentation, since I really do feel that the most benefit can be gained from a back and forth discussion. However, I will tailor the PowerPoint slides to help start and inform the discussion. I hope this sounds ok.

If you have any other questions, please let me know.

Thank you, Agata McIntyre

Puget Sound Clean Air Agency
1904 3rd Ave Ste 105
Seattle WA 98101-3317
Phone: (206) 689-4061
Fax: (206) 343-7522

From: htrim@pugetsound.org [mailto:htrim@pugetsound.org]
Sent: Tuesday, December 11, 2007 4:27 PM
To: Agata McIntyre
Cc: Steve Van Slyke
Subject: RE: Nucor Steel

Hi Agata,

I would appreciate if you would put together a powerpoint presentation that give the overview, the chemicals of interest – their current emission levels and the projected emissions increase.

Thanks so much,
Heather

Heather Trim
Urban Bays and Toxics Program Manager
People For Puget Sound
911 Western Ave, Suite 580
Seattle, WA 98104
General tel: 206.382.7007 X215
Direct tel: 206.382.7005, immediately hit 215
Fax: 206.382.7006
email: htrim@pugetsound.org
url: pugetsound.org

From: Agata McIntyre [mailto:AgataM@psc CleanAir.org]
Sent: Tuesday, December 11, 2007 11:52 AM
To: htrim@pugetsound.org
Cc: Steve Van Slyke
Subject: RE: Nucor Steel

Hi Heather,

The original comment period for the Air Operating Permit was scheduled to end this Friday. However, based on the comments we received for all three permits (Notice of Construction Order of Approval, Prevention of Significant Deterioration, and Air Operating Permit), we decided to extend the public comment period for all 3 until January 14th. All 3 permits are very interlinked, so it made most sense to have all of them open for comment until after the hearing.

We weren't planning to do a formal presentation, but we will be at the hearing venue (Alki Community Center) an hour before the hearing to answer questions and discuss the project. Representatives from Nucor will also be there to answer questions. We can run through a synopsis of the project and the review we did at that time if that's what everyone would like. We considered preparing a presentation but concluded that being available for questions may be a better, because this way we won't be guessing at what questions may come up and potentially addressing the wrong things during a pre-canned presentation.

Please give me a call or shoot me an email if you have any additional questions.

Thank you,

Agata McIntyre, PE
Air Pollution Engineer
Puget Sound Clean Air Agency
1904 3rd Ave Ste 105
Seattle WA 98101-3317
Phone: (206) 689-4061
Fax: (206) 343-7522

From: htrim@pugetsound.org [mailto:htrim@pugetsound.org]
Sent: Monday, December 10, 2007 4:18 PM
To: Agata McIntyre
Cc: Steve Van Slyke
Subject: Nucor Steel

Hi Agata,

I had thought that the Nucor Steel permit comments were due today but I was pleased to see that it is January. At the Jan 9 meeting, will you be making a full presentation?

Thanks,
Heather

Heather Trim
Urban Bays and Toxics Program Manager
People For Puget Sound
911 Western Ave, Suite 580
Seattle, WA 98104
General tel: 206.382.7007 X215
Direct tel: 206.382.7005, immediately hit 215
Fax: 206.382.7006
email: htrim@pugetsound.org
url: pugetsound.org

Agency Response:

Agency representatives were available for questions for 1 hour prior to the public hearing, which was held on January 9, 2008 at 7:30 pm the Alki Community Center. Agata McIntyre compiled a brief PowerPoint presentation, answering the questions asked by Ms. Trim. The information in this PowerPoint presentation was taken directly from the materials already available for public review. At Ms. Trim's request, the PowerPoint presentation was also given at the beginning of the public hearing.

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

WRITTEN COMMENT 20 (SHARON AND JIM PRICE), received on Jan. 15, 2008 (after close of comment period)

From: Web Customer - Sharon and Jim Price [<mailto:jasprice@isomedia.com>]
Sent: Tuesday, January 15, 2008 5:59 PM
To: Steve Van Slyke
Subject: Web Info Request - Permitting

A request for information has been submitted through the agency's Web site.

Name: Sharon and Jim Price
Address: 3624 22 Ave SW
City/State/ZIP: Seattle, WA 98106
Phone: (206)-935-1532
E-mail: jasprice@isomedia.com

Nature of Request: Is Nucor going to have a hearing in our neighborhood? I live 2 blocks from them and the Delridge Community Center is in our neighborhood, not Alki. I'm very upset about their increasing pollutants. You should see what we collect on the side of our house now! We are reluctant to spend time outside when we are home as it is. We are also tired of the explosions that go on now with their business --- too often our house is shaken to the bones. More production would be more explosions. We are not happy!

Why wasn't there more publicity about this meeting in the neighborhood?

Sharon and Jim Price

Agency Response:

In accordance with PS Clean Air and Ecology's policy, notices of the public hearing were published in the Seattle Times, the Journal of Commerce, on the PS Clean Air's website (www.pscleanair.org) and on Ecology's website (www.ecy.wa.gov). The meeting was held at the Alki Community Center for the reasons discussed in the response to comment 12.

Both PS Clean Air and Ecology conducted reviews of the emission increases from this project. These increases were found to be within acceptable levels with regard to ambient air impact criteria.

Explosions: The periodic explosions heard from the Nucor facility are due to the rapid vaporization of water on wet scrap as the scrap enters the furnace. Nucor has worked with the City of Seattle to reduce this problem by installing a roof over the yard where scrap is stored prior to entering the furnace. The scrap yard roof has served to reduce the number of explosions. However, in some instances, bundles of scrap shipped in by rail car or truck will retain some water even after sitting under the roof. In these instances, an explosion may occur.

Noise from the Nucor facility, including the periodic explosions discussed in this comment, is governed under Chapter 25.08 of the Seattle Municipal Code

(http://www.seattle.gov/dclu/codes/noise_ord.pdf). Specifically, Sections 25.08.410 and 420 address these periodic explosions. Subchapter IX of the regulation discusses enforcement.

Since the City of Seattle already has a noise control regulation, and since Nucor has already installed the scrap yard roof to mitigate the problem, PS Clean Air will not require additional mitigation at this time.

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.

Verbal Comments During Jan. 9, 2008 Hearing

Comments were received from seven commenters during the January 9, 2008 public hearing.

Six of the seven commenters spoke in support of the project. The commenters speaking in support of the project were:

- Ms. Miranda Taylor
- Mr. Dave Gering
- Mr. Chuck Farnam
- Mr. Daniel Snook
- Mr. Josh Sutton
- Ms. Karen Sisson

Agency Response:

No changes were requested to PS Clean Air's permits as a result of the verbal comments given by any of the above commenters who spoke in support of the project. Therefore, no changes were made.

A verbal comment was also provided by Ms. Heather Trim, representing People for Puget Sound. Ms. Trim expressed a concern about the following topics:

- 1) emission increases of various gaseous pollutants from the facility
- 2) cumulative impacts of different facilities and projects on the airshed
- 3) map of the location of where the discharge from the project will fall
- 4) mitigation of toxics and greenhouse gas increases
- 5) question regarding why the meeting is being held at Alki Community Center, and not closer to Nucor

Agency Response:

Ms. Trim followed-up her verbal testimony with an email with additional details about verbal comments 1 through 4. For answers to these questions, please see PS Clean Air's responses to Ms. Trim's comments under "Written Comment No. 3" above. Verbal comment No. 5 above was also raised by other commenters and discussed in PS Clean Air's responses to "Written Comment No. 12" and "Written Comment No. 13".

Conclusion: PS Clean Air made no changes to draft Order of Approval No. 9669 or draft Air Operating Permit 10281 as a result of the comment.